

**UNIVERSITY OF CAMBRIDGE SCHOOL OF CLINICAL MEDICINE  
CODE OF PRACTICE ON AUTHORSHIP**

The School of Clinical Medicine recognises that authorship may be a complex issue, especially in large, multidisciplinary and multi-centre projects. Whose contributions are seminal to a piece of work? Who defined the problem? Who did most of the work? Who did the work that was critical to the success of the project? How does the School respond to demands for authorship from collaborators and potential damage to reputation arising from under-attribution? To address these issues, the School has established this Code of Practice. It is designed to assist good management of staff and ethically rigorous student training, and to support common justice and common sense. It aims to provide a framework within which decisions of authorship may be made, and mechanisms to resolve disputes over authorship. It is hoped that the Code will minimise the number of disputes or frequency of recourse to arbitration, which could have a negative effect on the School's reputation. Additionally it aims to promote a high standard of manuscript quality and author accountability to collaborators and the wider scientific community. A good authorship policy is part of good research governance (see <http://www.medschl.cam.ac.uk/research/research-governance-information/> for further information on research governance within the School.

### **Preparation of the manuscript**

The School advises that authorship be considered early in the course of the work (and in any case decided on before the manuscript is prepared) and that all who contributed to the work are made aware of the decision and of any changes as the work proceeds. This may be through a formal planning meeting for the manuscript, in a Lab meeting, or simply through normal contact with staff. The Principal Investigator may wish to keep a record of such meetings. Soliciting informal internal peer review of the emerging manuscript from other principal investigators is good practice and particularly encouraged for early career principal investigators and for potential single author publications.

### **Authorship**

The decision as to who shall be cited as an author shall be guided by the prevailing ICMJE criteria <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>, the 2014 version of which is reproduced below for ease of reference:

- Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
- Drafting the work or revising it critically for important intellectual content; AND
- Final approval of the version to be published; AND
- 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.

Any staff, students or collaborators who satisfy these criteria should be included in the list of authors. The Principal Investigator may choose to identify additional individuals who do not fully meet any one of these criteria, but whose contributions across all three have provided essential support. This may be particularly relevant for early-career researchers. In accepting authorship, each researcher takes on responsibilities, they affirm that:

- they have read the final manuscript;
- they are prepared to defend at least their component of the work and preferably the entire manuscript against criticism, for example by giving a short oral presentation;
- they are prepared to sign a document (for example as required by a journal) recognising these obligations.

These criteria should also apply to collaborative papers that originate outside the School. Staff and students should make it clear to collaborators that Clinical School staff and students should not be listed as authors without their prior knowledge and acceptance.

### **Order of Authors**

During agreement of authors, the group should also agree a sequence for the authors' names. In general, the first author is the person who contributed the greatest practical work, subsequent authors may be listed by declining practical contribution; the last author (the "Senior Author") will most commonly be the Principal Investigator. Where it is difficult to define a scale of contribution, authors may be listed alphabetically or, if the journal's policies allow, two or more authors may be starred as joint first authors and/or joint corresponding/senior authors. Note that it may be necessary to change the order of authors if during the peer review process further experiments or analyses are requested which change the balance of effort on the paper.

### **Collaborations and Authorship**

The School's policy is that supply of reagents on its own does not, in general, fulfil any of these criteria. Hence, scientists who supply reagents to Principal Investigators should not normally be considered for authorship, but common courtesy is to inform them of this policy at the outset. Similarly, staff or students simply supplying reagents should not expect to be cited as an author. There may be exceptions to this, through a significant contribution or through special conditions attached to the supply of reagents, particularly in those cases where the reagents have not been published or reflect a substantial volume of work and intellectual input such as a unique multi-transgenic mouse strain whose phenotypic characterisation was key preliminary knowledge for the project.

### **Acknowledgements**

The acknowledgements section of a paper should be used to recognise the input of those not meeting the criteria for authorship but who have nonetheless made an important contribution. In particular, the help of technical services staff (*e.g.* animal technicians, instrumentation engineers, facility staff *etc.*) should be acknowledged if relevant. It is courteous to check with those you are acknowledging that they are happy with the wording. In addition, those who have donated reagents or critically reviewed the manuscript should be thanked for their help. Finally, funding agencies should be mentioned if they have funded the work or the salary of one of the authors.

### **Data Archiving**

The corresponding author on the paper (or the senior School author if the corresponding author is based elsewhere) is responsible for ensuring all primary data associated with the publication are stored safely, robustly and according to the funding organization's principles. The data may in future be required to support an intellectual property claim or, very rarely, to refute a challenge to the integrity of the paper.

### **Disputes**

Disputes should be dealt with, as far as possible, within the group led by the Principal Investigator and subsequently by the Head of Department (if the dispute involves the Head of Department, then the dispute may be taken direct to the School Office who will obtain appropriate academic guidance). Particular care needs to be taken with complaints from collaborators and any complaint that may involve Dignity at Work issues (HR can advise).

### **Post-retirement**

Papers written up in the immediate post-retirement period usually refer to experiments performed at the School and may be published under the University's address (manuscripts still need to go through any normal Departmental approval process). However, ex-staff may not continue to publish papers from the University's address indefinitely and specific written permission must be sought from the Head of Department in advance of publication once the retired scientist ceases to hold a Visitor's Agreement or Voluntary Research Agreement status in the Department.