

Editorial

Research is a Team Sport: Updated Authorship Guidelines for CORR®

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No accepted standard exists for what constitutes “authorship” of a scientific manuscript. Leading journals use different criteria [5, 9], and thoughtful organizations have opined on the subject, with each group’s recommendation reflecting subtle—but-important—differences [2, 8].

Principles of Good Authorship

Making an already-complex topic even more difficult, authorship standards continue to rapidly evolve. CORR® editorials have covered authorship twice in the last 5 years [3, 4]; our focus on the subject reflects the attention it continues to receive across the biomedical sciences [1]. Even so, misunderstandings abound. To distill a very complicated topic down to three principles, we consider that:

- Good authorship standards give credit only to those who earn it. “Gift authorship” abuses this principle. When a senior investigator allows his or her name to be added to a paper out of “respect,” or because he or she has provided mentorship, material support, or patients for a clinical series, that mentor diminishes the

efforts—and harms the career advancement—of the protégé whose career he or she seeks to support. Young academicians face enough pressures from outside the specialty. Senior investigators must support the career advancement of their juniors, and provide real mentorship, by showing integrity in this area.

- Good authorship standards protect authors. By keeping individuals from taking responsibility for what they have not done, clear authorship standards protect authors from being held responsible for important errors in data collection or acts of scientific misconduct they did not commit. High-profile cases continue to remind us that when authors do not adhere to good standards, they place themselves at considerable risk [6, 7, 10].
- Good authorship standards recognize that science is a team sport. As a specialty, we have work to do—there are many big, unanswered questions. The advancement of clinically relevant basic science and the well-being of our patients depend on answering those big questions. To get the answers, we will need to collaborate across departments and institutions.

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The ICMJE and Authorship

The International Committee of Medical Journal Editors (ICMJE) includes the editors of numerous leading general medical journals, among them *JAMA*, *New England Journal of Medicine*, and *Lancet*. Their work product, the Uniform Requirements for Manuscripts Submitted to Biomedical Journals [8] summarizes a thoughtful approach to almost every aspect of medical publishing, including authorship. The full ICMJE statement [8] on authorship can

be found at http://www.icmje.org/ethical_1author.html; it states in relevant part:

An “author” is generally considered to be someone who has made substantive intellectual contributions to a published study...An author must take responsibility for at least one component of the work, should be able to identify who is responsible for each other component, and should ideally be confident in their co-authors’ ability and integrity....

As well as:

- Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship.
- All persons designated as authors should qualify for authorship, and all those who qualify should be listed.
- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

And most importantly:

Authorship credit should be based on (1) substantial contributions to conception and design, 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. **Authors should meet conditions 1, 2, and 3** (emphasis added).

CORR’s Authorship Policy

Going forward, *Clinical Orthopaedics and Related Research*® will use the criteria for authorship outlined by the ICMJE. We will ask for no more than what the ICMJE has outlined and we will accept no less.

Some journals have had arbitrary limits on the number of authors permitted [5]. *Clinical Orthopaedics and Related Research*® will have no such limit as long as every author listed meets the ICMJE authorship criteria.

Before publication, we will require all coauthors to document, in writing, that they met those criteria. A link to the necessary form is found on our Instructions to Authors page http://www.clinorthop.org/author_and_reviewer_information.html.

These criteria will apply equally to traditional authorship, in which all authors are listed, and to group authorship, where a subset of authors writes on behalf of a group and the full list of authors is listed separately. We recommend group authorship for large collaborative efforts. Individuals who have contributed to a work but

who do not fulfill the criteria for authorship should be credited in the acknowledgements.

As previously recommended by this journal [3], we continue to urge researchers to discuss authorship before starting a study and to finalize a list of authors before submitting a work for peer review.

Science, to a large degree, depends on trust. We will no longer, as a matter of routine, ask authors to report their specific contributions nor to estimate the percentage contribution they made to the overall effort. We believe such estimates, in particular, are impossible to perform reliably. Having said that, the ICMJE states [8] that authors should be prepared to describe the contributions made by each coauthor. We agree. If we have concerns regarding authorship, we will inquire, and, if necessary, we will ask for additional documentation from each coauthor substantiating his or her contributions.

The public’s trust in us is perhaps more fragile now than it ever has been; this trust depends on our professional integrity. Journals cannot police the integrity of scientific investigators. Investigators must care enough to maintain it.

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References

1. Alberts B. Editorial: promoting scientific standards. *Science*. 2010;327:12.
2. American Academy of Orthopaedic Surgeons. Standards of Professionalism: Research and Academic Responsibilities. Adopted May 12, 2006. Available at http://www3.aaos.org/member_profcomp/research.pdf. Accessed December 17, 2012.
3. Brand RA. Editorial: thoughts on authorship. *Clin Orthop Relat Res*. 2008;466:1002–1005.
4. Brand RA. Editorial: further thoughts on authorship: gift authorship. *Clin Orthop Relat Res*. 2012;470:2926–2929.
5. Drazen JM, Curfman GD. Editorial: on authors and contributors. *N Engl J Med*. 2002;347:55.
6. Godlee F, Smith J, Marcovitch H. Editorial: Wakefield’s article linking MMR vaccine and autism was fraudulent. *BMJ*. 2011; 342:c7452.7.
7. Holden C. Korean stem cell scandal: Schatten: Pitt panel finds ‘misbehavior’ but not misconduct. *Science*. 2006;311:928.
8. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals: Ethical considerations in the conduct and reporting of research: Authorship and contributorship. Available at: http://www.icmje.org/ethical_1author.html. Accessed December 17, 2012.
9. JAMA. JAMA instructions for Authors. *JAMA*. 2006;295: 103–111.
10. Marris E, Check E. Disgraced cloner’s ally is cleared of misconduct. *Nature*. 2006;439:768–769.