## Responsible Conduct of Research

Publication practices and responsible authorship

# Authorship

- Who should be included?
- Author order

## Wildlife Society Bulletin

Then, when it comes time to share their research results with the rest of the world, wildlife scientists become writers. And not just any old kind of writer, either. They become a scientific writer, and therein lies a large part of that huge and multifaceted burden. This burden involves writing with accuracy, precision, clarity, and brevity (inasmuch as possible), in a highly rigid format that is nearly inflexible and almost completely unforgiving. Scientific writing is one of the most difficult forms of writing for an author to master. It takes work. In fact it takes a great deal of work. And it is not for the faint of heart.

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most of the manuscripts that became those papers went through anywhere from 8 to >12 revisions before being submitted.

## Wildlife Society Bulletin

The litmus test for co-authorship of a scientific paper is framed by the simple question: "Could I have done this project without that person's help?" If the answer is "no," then that person should be offered the opportunity to be a co-author. They should also, of course, be involved in the process of writing and revising the manuscript.

#### http://ccnmtl.columbia.edu/projects/rcr/rcr\_authorship/foundation/

#### International Committee of Medical Journal Editors (ICMJE) guidelines

- Authorship credit should be based 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. Authors should meet conditions 1, 2, and 3.
- When a large, multi-center group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript. These individuals should fully meet the criteria for authorship defined above and editors will ask these individuals to complete journal-specific author and conflict of interest disclosure forms. When submitting a group author manuscript, the corresponding author should clearly indicate the preferred citation and should clearly identify all individual authors as well as the group name. Journals will generally list other members of the group in the acknowledgements. The National Library of Medicine indexes the group name and the names of individuals the group has identified as being directly responsible for the manuscript.

#### International Committee of Medical Journal Editors (ICMJE) guidelines

- Acquisition of funding, collection of data, or general supervision of the research group, alone, does not justify authorship.
- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.
- The order of authorship on the byline should be a joint decision of the coauthors. Authors should be prepared to explain the order in which authors are listed.
- All contributors who do not meet the criteria for authorship should be listed in an acknowledgments section.

International Committee of Medical Journal Editors (ICMJE) guidelines

#### **Problems:**

Two major problems with the ICMJE guidelines are that many members of the scientific community are unaware of them and many scientists do not subscribe to them. According to Stanford University's Mildred Cho and Martha McKee, writing in *Science's Next Wave* in 2002, a 1994 study showed that 21% of authors of basic science papers and 30% of authors of clinical studies had no involvement in the conception or design of a project, the design of the study, the analysis and interpretation of data, or the writing or revisions. Actual practice, it seems, disagrees with ICMJE recommendations.

### Scenario Development

Talking Points:

# Authorship problems http://ccnmtl.columbia.edu/projects/rcr/rcr\_authorship/foundation/

- Inadequate credit and plagiarism
- Legitimate disagreement
- Legitimate errors (i.e., not misconduct)
- Ghost writers
- Sponsors rights to limit publication (drug company examples)
- Peer Review

### **General Resources**

https://rit.sr.unh.edu/training/rcr-training/authorship.html