

Responsible Authorship: Guidelines and Expectations

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ICMJE Guidelines for Authorship

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

Courtesy of Dennis Brown

International Committee of Medical Journal Editors

What does not count?

- Providing technical advice, reagents, patient data, funding
- Providing technical personnel, students to perform studies
- Routine data collection
- General supervision of group

Courtesy of Dennis Brown

Order of Authorship

Courtesy of Dennis Brown

Recommendations

- Discuss authorship **early!**
- **Frequent meetings** with co-investigators with re-negotiation of responsibilities
- Harvard guidelines: **“Primary” author** (who takes responsibility for work as a whole) should assure that all authors meet authorship criteria (sometimes written statements are required)

Courtesy of Dennis Brown

<http://hms.harvard.edu/content/authorship-guidelines>

How is author order determined?

- All authors: fulfill ICMJE requirements
- **First author**: performs “bulk” of the work, may write first draft of manuscript – often obvious
- **Last author**: takes responsibility for accuracy of the entire publication, usually more senior
- **Middle authors**: contributions do not rise to the level of first or senior authors
- **Corresponding author**: communicates with editor/reviewer – can be any of the authors

Courtesy of Dennis Brown

What about co-first authors?

- What is “co-first” author
- Often used as “compromise”
- Recognized for grants and promotions
- Cannot reverse order in your own CV, but explain role

Courtesy of Dennis Brown

Highlighting joint first-authors

- Use **bold** or underline to highlight all joint first-authors

1. **Dubnansky E, Omary MB.** Acknowledging joint first-authors of published work: the time has come. *Gastroenterology* 2012;143:879-880.

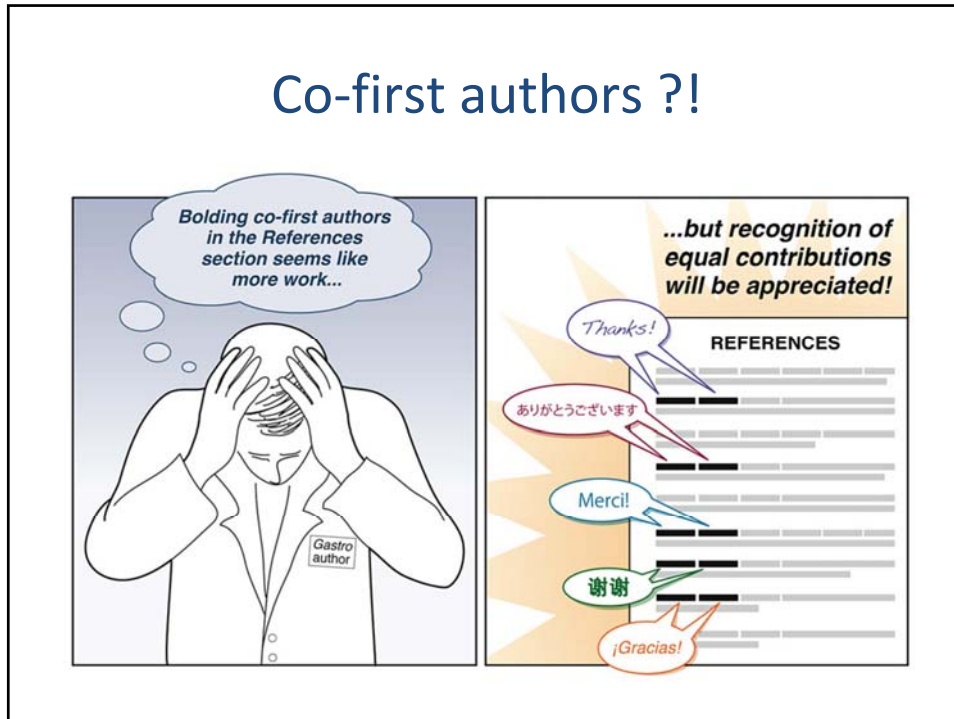
Why do we do this?

- Team research and team science have become commonplace in many studies
 - From 0% to 15% within 15 years for clinical paper
 - From 3% to 37% within 25 years for basic science
- Readers cannot distinguish whether a first-author is buried in the *et al. part of a “Chan et al.”* study

Why do we do this?

- Collaborate on timely and relevant initiatives, disseminating information and goals that are of common interest
 - Clinical guidelines, *In Memoriams*
- To encourage bibliographic database (PubMed), to highlight joint first-authors

Co-first authors ?!



How is senior author selected?

- Can there be more than one?
 - Overall supervision of project, generation of ideas (e.g. grant), drafting manuscript – team leader
 - Discussion needed, role in project, moving project forward, involvement of lab
- Requires compromise

Courtesy of Dennis Brown

Senior author responsibilities

- Ensure that clinical trial registered
- State that research is ethically conducted – approved by IRB, IACUC...etc.
- Avoid plagiarism, including self-plagiarism
- Disclose financial relationships and other conflict of interests

Courtesy of Dennis Brown

Minimum contribution for authorships

Courtesy of Dennis Brown

A colleague is helping me set up an assay. He did not contribute through benchwork. I would like to add him as co-author for helpful input.

Is this OK?

A non-collaborating researcher suggests an additional experiment during an informal conversation. It is incorporated into the final manuscript. She was not otherwise involved

Should she be a co-author?

Courtesy of Dennis Brown

If someone contributes patients,
but was not involved in design,
collecting data, or analysis, does
this merit a middle authorship?

Or “mere” mention in
the acknowledgement section?

Courtesy of Dennis Brown

If I develop an analysis plan for a paper and
another research/colleague then develops a
"spin-off" paper which has analogous methods
but in a different disease population, is that
enough grounds for me to have middle
authorship in their paper as well (and vice versa
if I wrote the analogous paper)?

For large database studies where a programmer performed the complicated analyses, what is my obligation to view and understand the primary data?

Between a data analyst who did all the analyses (a fairly complicated one) and another person who wrote the draft, who gets to be first author if both want to claim it?

How is prior work on same system acknowledged?

- Grad student initiates new disease model – take 4 years → Focus of thesis and one paper
- A postdoc in the lab uses model, completes work rapidly, and writes new paper
- Should the grad student be a co-author?
- Subsequently there are 3 other such papers from the lab. Grad student continues to be an author. Yes or No?

Courtesy of Dennis Brown

What about multi-author clinical trials or consortiums?

- Complicated, requires extensive pre-planning
- Guidelines should be established at the time consortium is set up.

[Ann Intern Med.](#) 2009 Sep 15;151(6):414-20.

Method for establishing authorship in a multicenter clinical trial.

[Whellan DJ](#)¹, [Ellis SJ](#), [Kraus WE](#), [Hawthorne K](#), [Piña IL](#), [Keteyian SJ](#), [Kitzman DW](#), [Cooper L](#), [Lee K](#), [O'Connor CM](#).

⊕ **Author information**

[Acta Anaesthesiol Scand.](#) 2011 Oct;55(9):1037-43. doi: 10.1111/j.1399-6576.2011.02477.x. Epub 2011 Jun 20.

Determining authorship in multicenter trials: a systematic review.

[Dulhunty JM](#)¹, [Boots RJ](#), [Paratz JD](#), [Lipman J](#).

⊕ **Author information**

Courtesy of Dennis Brown

Promiscuous authorship

- Awarding authorship to someone who has not contributed to manuscript in an intellectually significant manner
- Types:
 - Coercive: seniority or supervisory status to claim authorship
 - Honorary/guest: authorship awarded out of respect/friendship to increase status of work or improve CV for promotion

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Guest authorship turns bad

- Cloning paper in *Science*, 2005, retracted

Patient-Specific Embryonic Stem Cells Derived from Human SCNT Blastocysts
Woo Suk Hwang, Sung Il Roh, Byeong Chun Lee, Sung Keun Kang, Dae Kee Kwon, Sue Kim, Sun Jong Kim, Sun Woo Park, Hee Sun Kwon, Chang Kyu Lee, Jung Bok Lee, Jin Mee Kim, Curie Ahn, Sun Ha Paek, Sang Sik Chang, Jung Jin Koo, Hyun Soo Yoon, Jung Hye Hwang, Youn Young Hwang, Ye Soo Park, Sun Kyung Oh, Hee Sun Kim, Jong Hyuk Park, Shin Yong Moon, and Gerald Schatten
Science 17 June 2005 308: 1777–1783; published online 19 May 2005 [DOI: 10.1126/science.1112286] (in Reports)
[Abstract](#) » [Full Text](#) » [PDF](#) » [Supporting Online Material](#) » [Correction](#) » [Retraction](#) »

Woo Suk Hwang and Gerald Schatten (U Pitt)

Courtesy of Dennis Brown

What about technicians or programmers?

- Often contribute important data, perhaps they also contribute intellectually
 - Nice to “reward” their contribution
- But they may not provide intellectual input
- Do not have same career trajectory
- What about a technician in a sequencing facility?

Courtesy of Dennis Brown

Handling changing responsibilities

Courtesy of Dennis Brown

How do you handle discussions when roles on the manuscript may change over time?

How to address when one co-author's work on a project has increased more than another co-author - when to change co-author order and how to address?

What if postdoc leaves before work is finished

- No definite answer
- Depends on relative contribution to final manuscript
- Decision usually made by PI
- “Out of sight, out of mind” problem

Courtesy of Dennis Brown

What if workload changes?

- Reviews come in, require additional experiments, etc. One of the authors who was previously less involved steps up
- Is it legitimate to change the authorship order at this stage?

Negotiating the mentor/mentee
relationship

What is the difference in value placed between
1st vs. last author?

What if senior head of lab wants to be put on every paper while otherwise not engaged in research?

What should the mentee position in K award be?

Where will the mentor position be?

What is the importance of senior authorship for R01? Or is corresponding author enough?

How do we negotiate authorship with previous mentors now that I am self-funded?

Authorship and the mentor/mentee relationship

- Are you obliged to include mentor?
- Is mentor looking after your interests? **TRUST!**
- Does mentor allow you to publish “alone” (question of “independence”)
- Progression from first to last position expected in career path

Courtesy of Dennis Brown

Resolving authorship disputes

Who resolves authorship disputes

- Should be resolved by authors whenever possible
- If not possible, institution should provide assistance in resolving dispute
- Can contact Ombuds office, or local faculty development directors

Courtesy of Dennis Brown

Role of journals in mediating authorship disputes

NONE

Courtesy of Dennis Brown

Take home messages

- DISCUSS authorship early and often. No hard rules
- All authors should meet criteria
- Avoid duplicate publication, plagiarism, and other misconduct

Courtesy of Dennis Brown