#### Authorship

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## Why do we care about authorship?

- Communication of scientific results
- Allocation of credit
- Recognition by peers respect

- Finding a job
- Funding
- Promotion
- Fame, fortune, Nobel prizes etc

#### IMCJE Guidelines for Authorship

(International Committee of Medical Journal Editors)

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

#### 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

## Order of Authorship

## Recommendations for establishing authorship positions

- 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)
- More info at http://hms.harvard.edu/content/authorshipguidelines

#### Q: How is order of authors 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

#### Q: What about co-first authors?

- What is "co-first" author
- Often used as "compromise"
- Good for grants and promotions
- But still "Brown et al…." in many in text citations
- Cannot reverse order in your own CV, but explain role

## Q: How is senior author selected?

## What if more than one investigator wants to be senior author?

- Overall supervision of project, generation of ideas (e. g., from grant), drafting manuscript – team leader
- Discussion needed, role in project, moving project forward, involvement of lab, compromise

#### Other senior author responsibilities

- Ensure that clinical trial registered
- State that research is ethically conducted study approved by IRB, IACUC etc
- Avoid plagiarism, including self-plagiarism

Disclose financial relationships and other COIs

# Minimum contributions for authorship

Q: A colleague and I meet weekly to discuss project, ideas and troubleshooting. He did not contribute through benchwork. I would like to add him as co-author for helpful input.

Is this OK?

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

Should she be a co-author?

Q: If someone contributes essential equipment or reagents, but was not involved in design, collecting data, or analysis, does this merit a middle authorship?

Or "mere" mention in the acknowledgements section?

#### "Promiscuous" Authorship

Strange, Am J Physiol Cell Physiol, 2008

- 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" or guest: authorship awarded out of respect /friendship/to increase status of work/improve CV for promotion

#### "Guest" Authorship turns bad

Cloning paper in Science, 2005, retracte

#### 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)

#### Q: What about technicians?

• 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?

# How and when to address order of authorship

## Q: What if two postdocs are working on the same project?

- Dr A and Dr B, both post-docs, have worked for more than a year on a genetic study. Each was assigned to start sequencing the gene from opposite ends to identify a disease. Dr. A identifies the mutation first. Should she be first author?
  - A) Yes, absolutely. She made the discovery.
  - B) No, the person who designed and obtained funding for the study should be first author.
  - C) Not necessarily, and this situation would best have been avoided by discussing authorship up front

## Q: 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

## Q: What if workload changes from original plan?

Common example:

Reviews come in, require painstaking corrections, high resolution images etc. Author# 2 does not contribute at all but Author# 3 does.

Is it legitimate to alter the authorship order at this stage?

## Q: What about multi-author or multi-center trials?

Complicated - requires extensive pre-planning

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

Method for establishing authorship in a multicenter clinical trial.

Whellan DJ<sup>1</sup>, 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<sup>1</sup>, Boots RJ, Paratz JD, Lipman J.

Author information

## Q: How is prior work on same system acknowledged?

Grad student initiates new disease model - takes 4 years.

Description and characterization of this model is 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?

# 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

## Q: 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

#### Role of Journals in Mediating Authorship Disputes

### NONE

## Q: Can you report same work in different manuscripts?

- Duplicate publication is not allowed: repeat publication of data is not allowed
- Journal policy does not allow repeat or in most cases, pre-publication of data
- The bases of this position are international copyright laws and ethical conduct

#### Is there an exception to this policy?

- Data from rare or precious samples used as controls or for comparative purposes – but re-use must be made clear in text and figure legend
- In review articles with appropriate attribution of source
- Pre-publication allowed in some cases in some fields (http://arxiv.org/)

#### Take home points

 DISCUSS authorship early and often – no HARD rules

All authors should meet CRITERIA

• AVOID duplicate publication, plagiarism, other misconduct