Authorship: Who gets it, who earned it, and why?

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Acknowledgement

- Workshop based on curriculum for junior faculty found in MedEdPORTAL

Reminder...

Success in S&D is not equal to Publication.
Survey in of MS2–MS4 many years ago:
  ◦ Many feel unprepared to approach a mentor about authorship
  ◦ Most suggested that a workshop on authorship would be helpful
Survey of medical students doing a year of NIH research
  ◦ 66% never received training on authorship
  ◦ 41% thought training would be valuable
2005 study of >3000 NIH funded scientists
- 10% reported “inappropriate assignment of authorship credit”

2008 study of 6 medical journals with high impact factors:
- 21% prevalency of honorary or ghost authorship

2010 meta-analysis studying residency applications
- Authorship misrepresentation of 15.9% on applications that listed publications

Calvin & Hobbes

You know what I've noticed, Hobbes? Things don't bug you if you don't think about them.

So from now on, I simply won't think about anything I don't like, and I'll be happy all the time!

Don't you think that's a pretty silly and irresponsible way to live?

What a pretty afternoon.
Objectives

At the conclusion of the workshop participants will be able to:

- Define criteria and guidelines for authorship
- Recognize dilemmas that can arise in determining authorship
- Identify resources that may be useful to help with authorship decisions
You are working with Dr. Smith for SRP. Dr. Smith started this project last year, and you spend the summer analyzing data, which you turn over as Excel files to the fellow working on the project with you. You learn at the Winter Break that the paper has been written and submitted, but that you are not listed as an author. You are upset.
You worked with on a large clinical trial with Dr. Green for SRP. You worked diligently to extract patient data from EPIC and enter it into Excel, drafted part of the introduction to the paper, and even conducted some preliminary data analysis. An undergraduate was working on the project as well; her role was to consent patients for study enrollment. Dr. Green sends the manuscript to you for review before submission. Your name is on the manuscript, the undergraduate’s name is not.
You want to apply for dermatology. You did not do SRP, and you return to second year anxious about conducting research that will be well received in this competitive field. You find a mentor, but at the start of the MS2 block the project is behind schedule due to IRB approval. The mentor suggests that you work on a literature review to use as the background section of a planned future manuscript. In March, you learn that the project was completed, the manuscript was published, and your mentor listed you as an author. You are happy to add this to your CV.
Your roommate is working with a senior faculty member to analyze clinical data collected several years ago as part of an R01 (NIH Research Project Grant). She also drafts most of the paper, and reviews her mentor’s edits prior to submission. She is first author on the paper. You are working closely with a junior faculty member on a new quality and safety project that she developed with her senior mentor as part of a K23 (NIH Career Development Award). You collect the data, and like your roommate, you analyze the data, help to draft the paper, and review edits before submission. Your mentor is first author, you are middle author, and a senior faculty member is last author. You are upset.
You decide to work in the lab with Dr. Woods. She gives you a project to work on for SRP, which you complete, and then write the paper. When you leave at the end of the summer, the paper is in draft form. Dr. Woods and her post-docs spend a significant amount of time rewriting the paper, and send you the final version before it is submitted. You are disappointed to note that the post-docs are the first two authors, then you, then the faculty. You were hoping to be first author.
You work on a Quality and Safety project during the MS2 Block. You have enough data at the end of the Block to submit an abstract to a regional meeting. Abstract submission is on-line and you are nearing the deadline. You put yourself as first author, your mentor as second author, and the MS4 who helped you as third author. The next week you give your mentor a printed confirmation of abstract submission. Your mentor tells you there were two other people who should have been included, and that she wanted to be the last author.
Authorship Matters!

- Authors take responsibility and credit for work that is published
  - Prestige
  - Program
  - Productivity
  - Promotion
Keys to success

- Accurate understanding of the criteria for authorship
- Open and EARLY discussions with your mentor
- Understand expectations up front
- Honest appraisal your contributions
- Willingness to ask questions
So....what are the criteria?
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,

3. Final approval of the version to be published,

4. 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.

Must meet ALL FOUR criteria for authorship!!!
“Substantial Contribution”

- Conception and design
- Acquisition of data
- Analysis and interpretation of data
Drafting the article, or revising for important content

- Required for authorship
- Do not have to write the entire manuscript, but must contribute in some way
Final approval of the version to be published, and accountability

- Must read and concur with submission
- Should understand the role of each of the authors
- An opportunity to remove your name if you are not in agreement with the data being presented
Author Order

- First author is usually the person who contributes the most to the project, and MAY or MAY NOT be the mentor
  - Measuring who “contributes most” is completely at the discretion of the mentor
  - Often, student projects rely on a substantial amount of “set up” before the student enters the scene

- Mentor/senior author is generally last

- Middle authorship variable
Recognition for those who do not fulfill criteria for authorship

- Acknowledgements!
  - Within the text of the paper
  - Allows authors to give credit to those who contributed to the work, but not substantially enough to justify authorship
    - Lab tech who maintains cell culture lines
    - Statistical assistance
    - Research assistant who enrolled patients in a clinical trial
Revisit our Scenarios....
You are working with Dr. Smith for SRP. Dr. Smith started this project last year, and you spend the summer analyzing data, which you turn over as Excel files to the fellow working on the project with you. You learn at the Winter Break that the paper has been written and submitted, but that you are not listed as an author. You are upset.
Scenario 2

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You work on a Quality and Safety project during the MS2 Block. You have enough data at the end of the Block to submit an abstract to a regional meeting. Abstract submission is on-line and you are nearing the deadline. You put yourself as first author, your mentor as second author, and the MS4 who helped you as third author. The next week you give your mentor a printed confirmation of abstract submission. Your mentor tells you there were two other people who should have been included, and that she wanted to be the last author.
Take Home Points

- Authorship requires fulfillment of ALL FOUR ICMJE criteria
- Talk to your mentor often, but especially
  ◦ Before embarking on your project
  ◦ As writing of the manuscript begins
  ◦ When you are stepping away from the project due to scheduling, but want to insure you are not forgotten
- Ask the S&D team for help!!!
Questions? Discussion? Issues?