Strategies for Navigating Authorship

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The Challenge

It seems straightforward that each author's contributions to a manuscript should determine authors' inclusion and order. Yet research and personal experience indicate the surprisingly complex nature of authorship discussions and their potential for adverse effects on relationships and careers. As faculty and trainees often collaborate in the graduate medical education (GME) setting, differences in power and experience among authors, the transient nature of training, and the intensity of competing demands further complicate authorship decisions. Team members must employ strategies for accurately reflecting contributions while maintaining healthy dynamics that sustain long-term relationships.

What Is Known

Ultimately, scholarship requires that all project members understand and agree upon everyone's roles and responsibilities for achieving authorship inclusion and order position. The International Committee of Medical Journal Editors (ICMJE) defines 4 criteria that all authors of scientific manuscripts must meet: (1) substantially contribute to the work or data; (2) draft or review the manuscript critically for important intellectual content; (3) provide final approval; and (4) agree to be accountable for the work and address any related questions.[1]

Nonetheless, approaches to authorship vary due to lack of awareness of ICMJE criteria, personal choices, or an author's vulnerability within the academic system and culture.[2] Questionable authorship practices include conferral of authorship without meaningful contribution (eg, "honorary authorship," "gift authorship," "reciprocity"[3]) and exclusion from authorship despite extensive involvement (eg, "ghost authorship"). A sense of loyalty or obligation, academic rank, demographic factors, or different approaches to assigning value to various project tasks may also influence authorship.[3]

The writing team must also achieve consensus over the significance of different authorship positions (ie, first, second, last).[4] Variations in value assigned by institutions, promotion boards, and disciplines add further complexity and are often resolved using institution or profession-specific guidelines.

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RIP OUT ACTION ITEMS

1. Early on, establish consensus over authorship inclusion, order, and timeline.
2. Engage in regularly scheduled check-ins and adjust timelines and roles as necessary.
3. Prioritize relationships with respect, empathy, and integrity.

How You Start TODAY

1. **Identify your individual goals.** At the start of a project, deciding how actively you want to be involved will allow you to communicate and balance your needs with those of other team members. Do you want to lead, or provide guidance and consultation?
2. **Early in the process, reach consensus about authorship inclusion and order.** This open, honest, and direct discussion should include each author's anticipated contributions relative to ICMJE criteria, work required for each author role, the potential impact of a role on one's career stage and promotion plans, and how different roles are weighted by each author's institution and discipline. Delineate each author's order and corresponding responsibilities (eg, first author responsible for timelines, initial draft, assigning roles, and submission process).
3. **Evaluate trainees' abilities to participate beyond graduation.** Explore continued participation through remote, asynchronous work with shared, easily accessible documents across firewalls and platforms. Build in a succession plan. Can junior trainees be initially involved as mentees to facilitate project continuation? Remain mindful of a junior trainee's ability to meet ICMJE criteria and ensure agreement across all team members regarding their inclusion as an author.
4. **Clarify authorship status of those helping with study logistics.** Statisticians, simulation managers, librarians, and administrative support staff are among those involved in studies. Early discussion will facilitate decisions around their inclusion as authors who also participate in the *writing*. Including those who do not meet ICMJE authorship criteria in the *acknowledgements* is appropriate.
5. **Distribute opportunities for key authorship positions.** A team may work on multiple related projects or work on an individual project with multiple arms.

Rotating roles enhances breadth of experience and equity among authors.

6. **Collectively determine a feasible timeline.** Account for periods of intense clinical work and/or life demands (eg, the birth of a child, caretaking responsibilities, travel). Is the timeline flexible or fixed? Adjust as needed; if the work has a fixed deadline, authorship order may need to change.

What You Can Do LONG TERM

1. **Communicate often and openly.** Be proactive and include a standing agenda item on authorship for all team meetings to normalize the realities that study implementation, individual interests, and schedules can change. Acknowledge that trainees have unique demands (eg, lack of control over clinical schedules).
2. **Adjust authorship inclusion or position as needed.** If an author's contributions vary significantly from the plan, action is needed. Typically, the first author (if not the individual of concern) initiates the conversation and discusses the proposed change with the team. Refer to initial discussions regarding responsibilities to ensure accountability and make necessary adjustments to authorship and acknowledgements as needed.
3. **Prioritize relationships by acting with respect, empathy, and integrity.** Supporting one another and promoting work-life integration will contribute to the team's overall well-being and sustained academic output. If an author does not follow through on assigned tasks, assume the best intent, check in to provide assistance, and troubleshoot barriers. Faculty should seize opportunities to serve as coaches or mentors to junior team members.
4. **Address conflict productively.** Despite best efforts, difficult scenarios will arise. Often the most experienced author on the team will take the lead in raising the issue, working with involved individuals toward resolution as well as supporting and advocating for junior authors in the face of unbalanced power dynamics. However, junior authors who initiate authorship questions should be supported. Utilize conflict as an opportunity for teaching and reflection. A respected colleague, outside the authorship group, can serve as an informal mediator if needed. Refer to relevant institutional policies and seek advice of outside experienced scholars for guidance.

References and Resources for Further Reading

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