

## STUDENTS' CORNER

### Junior researchers and the authorship dilemma

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#### Abstract

*Medical students face authorship issues as they are increasingly involved in research. Senior researchers often claim undue credit, while students lack support and awareness of their rights. The fear of retaliation and power imbalance worsens the issue. Solutions such as ethics training, student representation on research committees, and mandatory formal authorship agreements have been proposed. These can create a more ethical research environment for future medical professionals.*

**Keywords:** *authorship ethics, medical student research, power dynamics, authorship disputes, academic exploitation*

In recent years, medical students have become more involved in research than ever before. This is driven by the growing competition around residency applications and international exams, which increasingly place value on research experience [1]. This growing involvement of students in biomedical research also brings in a range of ethical challenges, particularly around the issue of authorship which is often complex and unfair.

One of the biggest challenges medical students face is the issue of authorship in research. Senior researchers often demand a higher rank in the authorship list (first author, corresponding author, etc) regardless of their actual contributions. This coercive authorship practice pushes students who contributed significantly into the lower ranks or excludes them entirely [2]. Many students are made invisible, as their efforts are not acknowledged, and they are left out of important decisions about the project. "Gift authorship" is another troubling issue, where students are pressured to include names of mentors or senior researchers who made no meaningful contribution [2]. This practice undermines the value of the student's work. Fear of challenging authority, losing mentorship, or damaging relationships forces many to remain silent. Students also struggle due to a lack of mentorship in how to handle authorship disputes or research ethics. Many do not receive formal guidance and are left to navigate these conflicts alone, making them vulnerable to manipulation [3]. In some cases, mentors prioritise their own ambitions over student recognition, sidelining them despite their hard work. Some senior researchers take control of the project overriding the student's decisions and even use data collected by students for their own benefit without giving proper credit. These unethical acts continue largely unchallenged because of an environment where students are powerless and fear speaking up about discrepancies.

The root of many problems in academia can be traced back to how promotions are decided. Many institutions focus primarily on metrics like number of publications and the impact factor of journals when evaluating faculty [5,6]. This pressure often leads relatively senior researchers to focus on their own career advancement. In some cases, they may resort to unethical practices such as nepotism by assigning authorship to other senior colleagues or superiors who had little to no involvement [4]. Another reason why student researchers are vulnerable to exploitation is because they are unaware of their rights.

#### Strengthening student voices and reforming authorship practices

To address these challenges, creating a more supportive and inclusive research environment is important. Training students on ethical authorship and existing guidelines can help them navigate these issues effectively. Career advancement of senior researchers must be balanced with mentoring and collaborating with junior researchers. Students should be involved in the research process from the beginning and encouraged to voice their concerns. Including trained student representatives in scientific committees, which typically arbitrate authorship conflicts, can ensure their concerns are heard. However, in institutions where such committees do not exist, ethics committees which are already responsible for reviewing protocols and approving studies could take on this role to uphold ethical authorship practices. In such cases, ethics committees should be redesigned to include trained student representatives and be more consultative rather than authoritative top-down decision-makers, so that everyone can share their views leading to more balanced decisions.

Establishing student research clubs or forums can provide a space for collaboration, sharing ideas, and discussing common problems like authorship disputes. These platforms can help students build confidence, connect with peers, and understand their rights. Encouraging students to take on junior editor roles in journals can offer them valuable insights into the academic publishing process and help them learn ethical standards. Formalising the authorship process with an agreement following guidance from the United States National Institutes of Health (NIH), and guidelines from the Committee on Publication Ethics (COPE) can clarify roles and responsibilities and prevent disputes. Since authorship roles may evolve as the project

progresses, the agreement can include a mechanism for revisiting and updating contributions periodically. Clear guidelines should outline how contributions are credited for projects involving multiple departments to ensure fair recognition.

In conclusion, the issue of authorship in medical research highlights the different goals of senior and junior researchers. For senior researchers, authorship aids promotion, securing more funding, increasing visibility within the academic community, and advancing their careers. On the other hand, for junior researchers, authorship is a way to enter the field; a crucial element for future career opportunities, residency applications, and scholarships; and helps them establish their reputation, build valuable networks, and gain the experience needed for independent research in the future. To ensure that student researchers are given equitable attribution, promotion criteria need to shift focus toward mentorship, collaboration, and meaningful contributions. At the same time, integrating research ethics and training into medical education can help students navigate these issues and create a more equitable and supportive environment for everyone involved in research.

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