

## The authorship of scientific papers

The publication of an article in a scientific journal is often the ultimate goal of a long effort. The author starts with an idea, goes through a period of intellectual preparation, and implements the study. Ultimately, that effort condenses in the form of a defined and formatted text written according to predefined rules.

In the final stage, the collaborators must define authorship and co-authorship. Then, questions may arise – often ethically justifiable – about who is the real creator of the article and who, because they merely played a supporting role, deserve to be named as co-authors.

Numerous published papers and established rules and guidelines, make it clear that a person should be considered an author when his or her participation includes substantial contribution in the design, planning, acquisition, or analysis and interpretation of data; drafting and preparation of the paper or critical intellectual review; and approval of the final version to be published<sup>1,2</sup>. These are the criteria suggested by the *International Committee of Medical Journal Editors*<sup>3</sup>, detailed in the instructions for authors in our journal. Certainly, in a workgroup, these functions are intended for different individuals, under the coordination of a supervisor or head researcher.

We then come to the question of how to define the primary author of a study fairly: How should we pick the one who will receive the greatest share of the praise for the study and be named in references to the study, or, alternatively, the one who may be the first target of criticism and responsible for refuting those criticisms? The answer to this question might resolve the dilemma of who should be the primary author. The main author should be responsible regardless of the study's reception and be able to defend his or her research with propriety and expertise. If a person is not suited for this role, he or she better fits the position of co-author.

The advantages of authorship are the recognition of the author's intellectual efforts, the establishment and solidification of his or her reputation as a researcher through public endorsement, assurance of the continuity of his or her projects, prestige, and advancement in the academic hierarchy. On the other hand, according to Wooley, "*If you put your name on a work, you are eternally tied to it*"<sup>4</sup>. The authorship of a work establishes a direct responsibility for it, which means being responsible for ensuring its integrity and being able to defend it publicly.

The naming of co-authors and the order in which the co-authors are listed also deserve profound reflection. The high importance of scientific productivity in the medical field, which is translated as a mark of academic success, has led to some deviations and irregularities. A direct consequence of the overvaluation of publications is the increase in the average number of authors per published paper. With this increase, credit and liability for publications have been diluted and obscured. Again, ethically validated parameters must be used in order to establish the criteria for co-authorship.

In short, each author or co-author should have participated sufficiently in the work to take public responsibility for specific segments of the content. The authors and co-authors should decide the order of authorship as a group and be able to explain their decision. In addition, the inclusion of co-authors for reasons of political expediency, friendship, or the desire to extend a favor should be avoided.

**Dov Goldenberg**  
Associate Editor

### REFERENCES

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