

Worksheet for Identifying Investigators and Authorship

Name	Study Team Role	"P" for Planned "A" for Actual														Proposed Author Order		After Study	After Study
		Concept & Design		Data Acquisition		Data Analysis		Data Interpretation		Drafting Article		Revising for Intellectual Content		Approving Final Published Version		P	A	Actual Substantial Contribution for Authorship: Y or N	If N, were Contributions Sufficient for Acknowledgment: Y or N
		P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A		

Instructions:

1. Read definitions and information below.
2. Before study starts, list research team members who may qualify for authorship. Put a check mark in the “P” column if it is planned for the individual to complete work in each conceptual area (blue, yellow, and green sections).
3. Indicate proposed author order by placing numbers under the “P” column, with the number corresponding to authorship (e.g., 1 for first author, 2 for second author, etc.).
4. After the study, review and evaluate the actual work of each team member. Add any team member who was not initially listed, but completed work in each conceptual area. Determine if the actual activity was substantial enough to qualify for authorship. Put a Y for yes or an N for no in the designated column.
5. If the work of a team member was not substantial enough for authorship and determine if the contributions were sufficient for an acknowledgement by putting a Y for yes or an N for no in the designated column.

Investigator Definitions

- PI - An individual designated by the grantee to direct the project or activity being supported by the grant. He or she is responsible and accountable to the grantee and NIH for the proper conduct of the project or activity (NIH).
- Co-PI - An individual involved with the PI in the scientific development or execution of a project. The co-investigator (collaborator) may be employed by, or be affiliated with, the applicant/grantee organization or another organization participating in the project under a consortium agreement. A co-investigator typically devotes a specified percentage of time to the project and is considered “key personnel.” The designation of a co-investigator, if applicable, does not affect the PI’s roles and responsibilities as specified in the NIH Grants Policy Statement (NIH GPS). (NIH)
- Investigator - Conducts and directs study. Carries ultimate responsibility for research. Is referred to as the principal investigator when acts as a leader for an investigational team. (FH IRB)
- Sub-I - Helps design and/or conduct investigation at study site. Also called co-Investigator (FH IRB)

Authorship Determination -- International Committee of Medical Journal Editors (ICMJE)

An “author” is generally considered to be someone who has made substantive intellectual contributions to a published study, and biomedical authorship continues to have important academic, social, and financial implications (1). *An author must take responsibility for at least one component of the work, should be able to identify who is responsible for each other component, and should ideally be confident in their co-authors’ ability and integrity.* In the past, readers were rarely provided with information about contributions to studies from persons listed as authors and in Acknowledgments (2). Some journals now request and publish

information about the contributions of each person named as having participated in a submitted study, at least for original research. Editors are strongly encouraged to develop and implement a contributorship policy, as well as a policy on identifying who is responsible for the integrity of the work as a whole.

While contributorship and guarantorship policies obviously remove much of the ambiguity surrounding contributions, they leave unresolved the question of the quantity and quality of contribution that qualify for authorship. The ICJME has recommended the following criteria for authorship; these criteria are still appropriate for journals that distinguish authors from other contributors.

- Authorship credit should be based on 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; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3.
- When a large, multicenter group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript (3). These individuals should fully meet the criteria for authorship/contributorship defined above, and editors will ask these individuals to complete journal-specific author and conflict-of-interest disclosure forms. When submitting a manuscript authored by a group, the corresponding author should clearly indicate the preferred citation and identify all individual authors as well as the group name. Journals generally list other members of the group in the Acknowledgments. The NLM indexes the group name and the names of individuals the group has identified as being directly responsible for the manuscript; it also lists the names of collaborators if they are listed in Acknowledgments.
- Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship.
- All persons designated as authors should qualify for authorship, and all those who qualify should be listed.
- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

Some journals now also request that one or more authors, referred to as “guarantors,” be identified as the persons who take responsibility for the integrity of the work as a whole, from inception to published article, and publish that information. Increasingly, authorship of multicenter trials is attributed to a group. All members of the group who are named as authors should fully meet the above criteria for authorship/contributorship.

The group should jointly make decisions about contributors/authors before submitting the manuscript for publication. The corresponding author/guarantor should be prepared to explain the presence and order of these individuals. It is not the role of editors to make authorship/contributorship decisions or to arbitrate conflicts related to authorship.

Contributors Listed in Acknowledgments

All contributors who do not meet the criteria for authorship should be listed in an acknowledgments section. Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chairperson who provided only general support. Editors should ask corresponding authors to declare whether they had assistance with study design, data collection, data analysis, or manuscript preparation. If such assistance was available, the authors should disclose the identity of the individuals who provided this assistance and the entity that supported it in the published article. Financial and material support should also be acknowledged.

Groups of persons who have contributed materially to the paper but whose contributions do not justify authorship may be listed under such headings as “clinical investigators” or “participating investigators,” and their function or contribution should be described—for example, “served as scientific advisors,” “critically reviewed the study proposal,” “collected data,” or “provided and cared for study patients.” Because readers may infer their endorsement of the data and conclusions, these persons must give written permission to be acknowledged.