Collaborative Research

Authorship, Data Sharing, and Avoiding Pitfalls

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A. “Collaborative research” is here taken to mean any research in which two or more researchers work together toward a common goal, and in which all of the researchers make an important, substantive contribution to the project. Not counted as researchers are people who provide assistance but do not make a substantive contribution; for example, someone who is hired to transcribe interviews but makes no other contribution to the research is not considered a part of the collaborative team.

B. The focus is on aspects of collaborative research that are unregulated.

Key moments in collaborative research

C. This bare-bones outline is intended to represent in rough chronological order most of the decision points in any collaborative research project. We will discuss the items in boldface first, and other items as time allows.

1. The germ of an idea
2. Talking it over
3. Assembling a team
4. Assigning tasks
5. Designing the research protocol or methodology
6. Writing a grant application
7. Administering the approved grant
8. Paperwork and permissions (IACUC, IRB, etc.)
9. Assigning authorship
10. Collecting data
11. Analyzing data
12. Writing a first draft of the report
13. Writing the final report
14. Submitting the report for publication
15. Responding to reviewer’s comments
16. Responding to correspondence based on the publication
17. Storing the data
18. Closing out the collaboration
19. Sharing the data with members of the now-disbanded research team
20. Sharing data with other researchers
21. Initiating new research in the same general area

* These tasks first arise more-or-less when indicated, but continue throughout the project.
† In some cases, regulations or policies specify a minimum period for the storage of data.
§ These tasks are open-ended, with no set end date.

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This publication can be found at http://teachrcr.us/rs/collaborativeresearch.pdf

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D. For clarity of presentation only one grant application and one publication are considered; in real life, some collaborations require more than one grant application and produce both publications and oral presentations. Note also that in any given collaboration some of the key moments listed here might well occur simultaneously, in a different order, more than once, or not at all. Some might also take place without one or more of the researchers being consciously aware of them.

E. Many of these tasks can be shared by team members, but some absolutely require that one person, commonly called the Principal Investigator or “PI”, take primary responsibility. Such tasks include administering the approved grant, taking care of paperwork and permissions, and responding to correspondence based on the publication.

Avoiding pitfalls

F. In research, as in life, working with other people is troublesome but unavoidable. Most of the time the benefits outweigh the burdens, but sometimes the burdens are overwhelming. Probably the best time to avoid pitfalls is at points 3 and 4 in the outline above – that is, at the very beginning of the collaboration.

G. Collaborations can go wrong because of a clash of unspoken assumptions. It’s hard to talk about unspoken assumptions because they are often unconscious and can be about sensitive issues. It might be easier to raise these issues if you have a checklist of items to discuss before making a commitment to the collaboration.

H. As part of the conversation before teaming up, it might be helpful to agree on a person who will arbitrate any disputes. It might be a department chair, a lab director, or a trusted colleague farther afield. Obviously this arbiter will have to agree to take on this responsibility.

Assembling the team and assigning tasks

I. Who will act as PI?

J. What can each researcher contribute?
   • Trivial collaborations; routine collaborations; true collaborations

K. How can you be sure your prospective collaborators actually have the expertise and the time needed?

Assigning authorship

L. Authors get credit but also take responsibility

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1 Peter Cherbas introduced this typology of collaborative research at the first workshop in the “Working Together” series.
M. American Sociological Association Code of Ethics²

15. Authorship Credit

(a) Sociologists take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have contributed.

(b) Sociologists ensure that principal authorship and other publication credits are based on the relative scientific or professional contributions of the individuals involved, regardless of their status. In claiming or determining the ordering of authorship, sociologists seek to reflect accurately the contributions of main participants in the research and writing process.

(c) A student is usually listed as principal author on any multiple authored publication that substantially derives from the student's dissertation or thesis.

N. International Committee of Medical Journal Editors³

Authorship credit should be based only on 1) substantial contributions to conception and design, or 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. Conditions 1, 2, and 3 must all be met. Acquisition of funding, the collection of data, or general supervision of the research group, by themselves, do not justify authorship.

Sharing the data with members of the now-disbanded research team

O. Data ownership; data access; data use

P. American Sociological Association Code of Ethics

13.05 Data Sharing

(a) Sociologists share data and pertinent documentation as a regular practice. Sociologists make their data available after completion of the project or its major publications [with exceptions to protect proprietary agreements and confidentiality] . . .

(e) Sociologists may ask persons who request their data for further analysis to bear the associated incremental costs, if necessary.

(f) Sociologists who use data from others for further analyses explicitly acknowledge the contribution of the initial researchers.


³ http://www.icmje.org/index.html