

## ETHICS FORUM

# PREEMPTING DISCORD: PRENUPTIAL AGREEMENTS FOR SCIENTISTS

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A recent article in the *Chronicle of Higher Education* entitled "When a Mentor Becomes a Thief" describes a doctoral student who, after working on a project for seven years, found what she thought was her discovery published under the name of her advisor. Her contribution was acknowledged in a footnote. It appears that while she was working on the project she assumed she would be the lead author, but she never did confirm that assumption with her advisor.

"Misunderstandings" like this are not limited to mentors and their postdocs or doctoral students. Conflicts over authorship and a host of other issues also erupt among collaborating scientists who are peers. In the worst situations, not only does the research project suffer, but investigators also wind up leveling accusations against one another, sometimes through formal, adversarial mechanisms. It is painful and somewhat paradoxical to see collaborating scientists neglect such planning and foresight when the scientists devote so much of their intellectual and other energies and resources, often over many years, to make the collaboration successful.

In the Office of the Ombudsman, we hear many stories like the one above. Although we are often able to help people resolve such disputes, we are struck by how many could have been avoided if only the collaborators had taken a few precautionary steps at the outset. People often assume that since they share an interest in the same research area and have complementary skills and areas of expertise, things will just work out. But scientific collaborations, like other important relationships, take some forethought and some ongoing work to succeed.

While scientists most often bring authorship disputes to our office, there is a wide range of issues on which collaboration can falter. We have seen people in dispute over issues of access, sharing, management, and analysis of data; the use and sharing of biological materials; and even the scope and direction of the research project. We have also worked on disputes involving the collaborative relationship itself—sharing research space, the structure and function of research team meetings, decisions about staffing needs of the project, personal and scientific conflicts among members of the research team, and questions

regarding who gets to be the public spokesperson for a project if research results attract media attention.

Most often, problems arise in scientific collaborations because the scientists failed to explicitly define their expectations of one another. We believe that framing a partnering agreement at the outset of the research project can help enormously in setting the collaboration on a solid footing. Ideally, the agreement spells out exactly what the roles and contributions of each scientist will be and provides a mechanism for decision making for major issues such as authorship, additional collaborations, and the sharing of biological materials.

Some people prefer written partnering agreements signed by the key collaborators. For others, a written agreement feels too legalistic, too much like a contract. Written agreements may offer the advantage of being less ambiguous than each party's selective recall of what was agreed to, but we believe that it is most important that collaborators commence their project by anticipating, discussing, and resolving possible areas of disagreement. Moreover, the parties can jointly define a process for constructively handling disputes should they arise in the future.

Although each research project has unique features, certain core issues are common to most of them and can be addressed by collaborators posing the following questions:

- What are the scientific issues, goals, and anticipated outcomes or products of the collaboration? When is the project over? Are all members of the research team on the same wavelength regarding these issues?
- What are the expected contributions of each participant?
- Who will write any progress reports and final reports?
- How will you decide about redirecting the research agenda as discoveries are made?
- What will be your mechanism for routine communications among members of the research team (to ensure that all appropriate members of the team are kept fully informed of relevant issues)?
- How will you negotiate the development of new collaborations and spin-off projects, if any?
- How, and by whom, will personnel decisions be made? How and by whom will personnel be supervised?
- What will be the criteria and the process for assigning authorship and credit?
- How will credit be attributed to each collaborator's institution for public presentations, abstracts, and written articles?
- How and by whom will public presentations be made?
- How and by whom will media inquiries be handled?
- When and how will you handle intellectual property and patent applications?

- How and by whom will data be managed? How will access to data be managed? How will you handle long-term storage and access to data after the project is complete?
- Should one of the principals of the research team move to another institution or leave the project, how will you handle, data, specimens, lab books, and authorship and credit? (Keep in mind that data, specimens, and lab books are the property of NIH.)
- Of course, it is easy to imagine that for any particular research project there might be additional specific questions that should be added to this list.

Many potential collaborators can answer these questions simply by getting together and talking things out. For some people a neutral third party, with no involvement in the project, can help facilitate such discussions and maximize their effectiveness. Staff in the Office of the Ombudsman are available to facilitate such discussions. For those who would like to translate the results of their discussion into written partnering agreements, we are prepared to help in that way as well. The specific decisions, of course, belong to the scientists.

We recognize that using scientific prenuptials goes against the informal norms of science. But we have seen the damage that can be caused, both scientifically and personally, when scientists at NIH overlook questions like these in their enthusiasm to launch an intellectually exciting collaboration.