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BEFORE SETTING UP A SCIENTIFIC COLLABORATION

esearch collaborations can be a very useful adjunct to a company's scientific investigations. They can expand their intellectual property portfolios, speed up the entry of molecules into the clinic, and possibly enhance their future revenue streams. In fact, there may be times when your company's research efforts will require a collaboration with another scientist to move the project forward. There are two distinct sides of the collaboration coin. On one side, you contact someone to enlist his or her help in completing a project. This arrangement is centered on your scientific agenda. The flip side of this collaboration coin is when an outside researcher contacts you to help solve a problem with his or her scientific agenda. While many of us prefer to be the initiator in collaborations, try to keep an open mind if approached to help with a research study. This collaboration may take you into new and interesting areas of biology that might broaden your intellectual horizons and give you access to new reagents, model systems, or both. Whatever the origin of the collaboration, experience proves that the best collaborations are true collaborations, with input from both sides.

There are six key questions that you should ask yourself when considering whether to enter into a research collaboration.

QUESTION NO. 1. What is my collaborator's scientific reputation? Collaborations can be initiated in any number of ways. Sometimes they start over an interesting discussion at a poster session during a research conference. Other times they begin when your recently published paper sparks an idea in someone else's mind, leading that person to call or e-mail you. It is quite common to collaborate with someone that you have never met in person. Don't let the fact that you haven't run into an investigator face to face deter you from moving forward with an interesting scientific idea. At the same time, you do need to find out if the person you would be working with is reputable. Trust me on this: not all scientists have the same experimental background and ethical focus that you do. Ask around to see if any of your trusted colleagues knows your potential collaborator. Run a PubMed search as well to discover how often and where they publish. Finally, read at least a few of his or her recent papers and review them carefully to assess their quality. While collaborating with a top-notch investigator can certainly enhance your reputation, working with someone who misinterprets or over-interprets his or her poor quality data will only be an impediment to your career.

QUESTION NO. 2. How important is it to obtain the data? Ask yourself if the collaboration is critical to proving your hypothesis, or are the data just to complete a picture that already has been mostly filled in. The former makes the collaboration route much more compelling, the latter, much less so. Choose your collaborator very carefully, especially if the data will make or break your hypothesis.

QUESTION NO. 3. Could I obtain the data any other way? Think about whether you have the financial, technical, and personnel resources to do the experiments in your own lab. Even if it's not feasible to take on the experiments yourself, in some circumstances you

may be able to take advantage of a core facility to generate a key reagent needed to advance your work.

QUESTION NO. 4. Is this the right person to collaborate with? Again, check with colleagues about your potential collaborator's reputation. It is rare that there would be only a single investigator with the reagents, skills, or knowledge to help you. There may be another investigator in the field that you would be better off working with, if only because your personalities or work habits mesh better. If you consistently hear that someone is difficult to work with, don't assume that you are going to be the exception to the rule and have an easy go of it. Take into account where a collaborator is located as well, since you may need to send them reagents (e.g. knock-out mice) that can be difficult to ship, especially to foreign countries.

QUESTION NO.5. Do I have the time and inclination to follow up on this collaboration? Working with an investigator in another department or at a different institution is going to take effort on your part. Reagents may need to be exchanged, paperwork filled out, phone calls made, university officials notified, data reviewed and discussed. Ask yourself if this is really something that you're ready to commit to. You may find that an unproductive collaboration is worse than having no collaboration at all.

QUESTION NO. 6. Is my collaborator at an institution that is easy to work with? Before setting up a collaboration, it is likely that you will have to exchange some paperwork with your collaborator. Most likely this will be some type of material transfer agreement (MTA) or cooperative research and development agreement (CRADA). As a result, you will be working not only with your collaborator, but also with his or her technology transfer office. Some of these offices are easy to work with and will sign off on your paperwork quite readily; others will refuse to do so and will want to negotiate the various clauses and phrases. These types of negotiations can drag on for months (and sometimes years), significantly slowing down your ability to move the science forward. Ask colleagues or others within your organization if they know whether your potential collaborator's institution is easy or difficult to work with.

Asking and answering the questions listed here should go a long way toward helping you decide whether to set up a collaboration, and, if so, help you to find a suitable person with whom to work. If done properly and for the right reasons, research collaborations can benefit your organization. Furthermore, the knowledge gained can provide a significant boost to your organization's intellectual property portfolio, clinical efforts, and possibly its bottom line as well.

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