Women in Cell Biology

# Advice on Choosing a Successful Post-doctoral Position

Choosing the right post-doctoral position can be one of the most important decisions of a scientist's professional life. But some post-docs are unhappily surprised to discover that their chosen lab seems to be totally different when they arrive than it did the day they interviewed. How can a prospective post-doc make a solid choice that is good for her or him and good for the lab?

This is a vital question, as the choice will dictate a good part of the rest of the post-doc's professional (and personal) life – not just the four years or so during which s/he will be in the lab. The way that the PI deals with challenges and opportunities will influence enormously the traits and style that the post-doc internalizes and employs when it becomes his or her turn to lead. It is best to aim for both a role model whose style one can respect and wish to emulate, and a situation that combines good leadership with good science.

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Many graduate students are so influenced by the stress and excitement of interviewing for a position that they forget that an interview works both ways. Not only is it an opportunity for the student to shine, but it is also an opportunity for the student to gain an understanding of how other labs operate.

Here are a few things to do, not to do, and some signals and qualities to watch out for:

***Make sure that the walk fits the talk.*** The "talk" is the lab group mythology, which is what the PI and lab members in groups say. What actually goes on, the "walk", will most likely only be disclosed in one-on-one sessions with individual lab members, either directly, or subtly. Remember that if they hesitate in answering a question, there is a good chance that they are trying to remember the party-line (mythology) or they are trying to be a diplomat (spin doctor).

Look for how group members relate to each other. One can tell a lot about the PI's leadership style by the way lab members carry themselves, and how they treat each other, you, and especially people with little power or status.

***Tune into warning signs.*** If you sense that something is not right, it may be an important indication that it isn't. Red flags may include things like:

- No one-on-one time with lab members.
- People in the lab are cynical, sullen and/or depressed.
- Lab members don't personally respect their PI.
- The science doesn't suit you, or, more ominously, you have the feeling that people

are not being straight in discussing and/or publishing their results.
- You are promised your own project on the condition that you take on another project first.
- Feeling like you are on a honeymoon, or seeing an exuberance that doesn't feel natural.
- You find yourself "talking yourself into" working there.
- You can't quite put your finger on it, but something just doesn't feel right.

***Insist on a feeling of trust and community.*** Look for clarity, understanding, and openness to everyone inside and outside the lab. The opposite to these qualities are secrecy within the lab and to outsiders, lab members who are confused and don't seem to "get it" themselves, and a certain rigidity that should be palpable even with one visit.

***Consider the scientific track record of the lab.*** While history doesn't always repeat itself, it can be a good place to learn about how a lab is run. Does the lab publish frequently in reputable journals? Publication is the metric by which academics are measured, and is a measure of productivity that is critical for getting almost any type of job. Is the number of publications representative of the lab size? A lab with 30 post-docs that publishes 3-4 high profile papers a year is probably not as organized and efficient as a lab with six post-docs that publishes 1-2 high-impact papers per year.

***Value a focused research program.*** Look for a logical coherence in research topics. Do current research questions relate reasonably to each other? Has the lab changed focus frequently and significantly over time? Research on a fertile topic, which has been built on a solid foundation of findings, thrives in a lab. However, research based on a few sensational findings or a few chance observations may disappear when the primary author leaves the lab, and may not be a productive area to invest time and hard work.

***Be cautious about excessive overlap between projects.*** Within the lab, look for enough similarity between the lines of research to provide synergy, while maintaining enough distance between them to prevent conflicts. This is not always an easy balance to create or maintain, but in a good area of research, there are far more important questions than there are people to do the work.

***Look up the history of alumni.*** Look at the PI's list of publications and learn where former lab members are now. Are they successful? Do they have careers that would make you happy?

Careful attention to these details while interviewing, *and* to your impressions afterwards, will help you identify the PI and lab that is the best fit for you both personally and scientifically. This in turn will create the best opportunity for your success and, most importantly, your lifelong enjoyment of a scientific career. ■

*—Gráinne Whitman, Brian Guzik and Larry Goldstein*