

FOCUS: EDUCATION — CAREER ADVICE

Reflections on Searching for a Postdoctoral Position: Three Points to Ponder

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Choosing the right laboratory in which to do postdoctoral training is perhaps one of the most important decisions that a scientist makes in his or her career. Does one choose a laboratory based on the research topic or the research style of the mentor? Does one choose a large laboratory or a small one? How does one fit the selection of a postdoctoral laboratory into the context of one's long-range career goals? Here, I briefly discuss three points worth considering in seeking a research laboratory for postdoctoral training after the completion of a graduate degree.

It has been 27 years since I went through the process of searching for a postdoctoral position. Since that time, I have set up my own research laboratory and trained 38 postdoctoral fellows who have left my program at the National Institutes of Health (NIH†) to lead their own independent research endeavors in academia. On a recent visit to Yale, I was asked by graduate students to consider writing a few words on

items that I deem important when seeking a postdoctoral position. In an era of increasing competition for a diminishing number of academic career positions, picking the right laboratory can be a key factor in determining a successful or unsuccessful job search at the end of one's postdoctoral training. I should preface my three points below by confessing that I am not an expert on this subject. My reflections on this topic

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†Abbreviations: NIH, National Institutes of Health; PCR, polymerase chain reaction.

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represent a personal perspective; others may hold different views that may be equally, if not more, instructive.

1. KNOW THYSELF.

Shakespeare famously wrote that “all that glisters is not gold.” While it is easy to be attracted to high profile laboratories, one should ponder the choices carefully because in many cases those settings are not always a good fit.

A good fit starts with knowing what you ultimately want to do. Coming at the end of your graduate education, this is frequently a difficult question to answer because the ultimate end point may seem ill-defined and distant in the future. Hence, perhaps a more concrete way of framing the question is to ask, “How do you see yourself 5 years from now, 10 years from now, 20 years from now?”

Five years from now would represent approximately the end of your postdoctoral training. If the goal at the end of your postdoctoral training is to become a newly minted assistant professor at a competitive academic center, then your approach to a postdoctoral laboratory may be quite different than if you wish to teach community college or want to join a biochemical supply firm to develop PCR assays. If you elect the first scenario, then are you prepared, at the 10-year time frame, to be on the cusp of an up-or-out (tenure) decision by your institution? At 20 years, how do you see yourself as a mid-career scientist? Do you relish the idea of chasing after grants to fund your small-, medium-, large-sized laboratory? And how does your personal life look: spouse and (how many) children?

I am frequently surprised in my conversations with students at how many simply look to tomorrow, the next month, and perhaps the end of the year. Relatively few profess to giving deliberate thought to what the picture might be 5, 10, 20 years hence. It is not that I am suggesting that we can prophesize the future, but some thoughtful projections may serve well to guide current decisions on excluding some difficult choices.

2. DREAM BIG, BUT MORE IMPORTANTLY, FIND SOMEONE WHO BELIEVES IN YOUR BIG DREAM.

I have been told there are two ways that general managers of professional sports teams approach the draft for new players. One school of thought is that you draft to fill the position that your team needs; the other is that you draft the best athlete who happens to be available at the time of your pick. In the vernacular of picking a postdoctoral laboratory, one could say that the two ways are to pick based on the research topic of the lab or to pick based on the person leading the lab. What is the correct answer? The glib response is that you pick both ways. However, if I am truly pushed on one versus the other, I lean toward picking based on the person rather than the topic.

My reasoning is the following: Topics come and topics go; today’s fashion is tomorrow’s anachronism. What you do hope to find is a constant mentor who guides, helps, and supports you today and who will be there for you tomorrow and thereafter. When I was looking, I was told to dream big, but more importantly, I was told to find someone who would believe in and support my big dreams. Dreams won’t always come true, but their chances of success are better if there is someone to help you make them happen.

3. IF YOU FAIL TO PLAN, YOU PLAN TO FAIL.

“Dear Dr. Jeang, I am graduating in two months, and I would like to start as a postdoc in your lab.” E-mails that begin with sentences like this one all too often show up in my mailbox. Invariably, I cannot provide a positive response to such inquiries. Like other competitive laboratories, my lab is always fully occupied; a position is unlikely to be available without a minimum of a 6-month or likely 1-year lead time. So in the quest for a suitable laboratory, one must plan early. Start speaking with your supervisor and other faculty members at least a year before you graduate and begin approaching

prospective mentors at conferences and by e-mail with a generous time line. Acting early and planning well ahead increases the likelihood that you will land your first-choice laboratory.

Good planning also requires that you do your homework. You must make a diligent effort to understand the style and track record of your prospective mentor. Does he/she lead by example or by confabulation? Is he/she hands-on or hands-off? Will he/she spend time with his postdocs or is he/she an absentee globe-trotting landlord? What are his/her expectations of you? When it comes time for you to leave his/her laboratory, do you have to change fields or can you take every

reagent that you want from the laboratory? How successful have his/her past trainees been in finding career jobs? Finally, give some thought to two different phenotypes of famous scientists. One is replete with protégés who have gone on to become equally well-known, and the other is also fabulously famous but you have no clue to what has become of the postdocs who have trained with him/her. As you go forward, ask widely, plan early, and choose wisely. Good luck!

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