

Navigating the Stages of Your Career: Tips and Advice for Postdoctoral Fellows

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What advice would you give to trainees researching postdoc positions?

Penny Dacks: "start early and start by informational interviewing. So if you are going to a postdoc within the field of your PhD, then chances are your PhD advisor will hopefully help you find a really great mentor and a great lab. But if you're planning to do any kind of shift in your research, your PhD advisor may not be able to provide that support. And if that's the case, I think a lot of us just... we do a lot of reading, we identify areas we want to go to and then you just send an email saying: 'Hey do you have a position available? I'm interested in you.' We send that email to different faculty and I think that it's much better to, from a very early stage to start meeting with these people who you might potentially be interested in working for. But meet with them for informational interviews, ask them what it's like in the field, ask them where they think the field is going to and through that process, hopefully, get some really wonderful mentors and have a better perspective on where your career could go, where you want your career to go, which labs would be the best labs to go to."

Sofia Jurgensen Hartke: "...it's extremely important to choose well your lab, of course, this is obvious, but it's not that obvious. Most people only look for publications and good publications and their interest that the PI they're going to work with works in an interesting line. Of course, all of that is important, but you have to care about the quality of life that you're going to have and you have to make sure, you know, you're going to a place where you're going to be treated decently and you're going to be able to balance the work and life outside of the lab and also have a good environment in the lab. So one of my biggest suggestions is...you have to look for what happened to the former alumni of the lab. 'Where are they now? Are they PI's? Are they successful? How many were there and how many are successful?' How many papers each post doc publishes, because if you go to a lab with 30 post docs and the lab has two or three excellent papers a year, the ratio in the end is not favorable. It's not like everyone is successful. This is one of the things you have to look for. Another thing is that I strongly recommend you talk to former students of the lab and try to get a feeling of how it is to be supervised by the PI and to work in that lab. And really look for a place where you are going to be mentored and the PI is going to care about your career."

Jean-François Gariépy: "...whatever field you are in, you should look who's made the most impressive discoveries to you and go to these guys and ask them if you can work for them. Target for the best and don't feel that it's not your place to be there. It is your place to be there, you are a post doc, you can make science advancements and you have to target the labs that have proven that they can innovate."

There is significant international interest in seeking postdoc positions. What would you recommend trainees do to secure a rewarding postdoc position outside their own country?

Sofia Jurgensen Hartke: "If you are in an international context and you want to come to the U.S., which is what I did; or you want to go to Europe; even if you are staying in your own country and you want to do a post doc; you eventually will have to change labs. And because it's not obvious you really have to make sure you are going to a place where you will have a good environment to work, you won't be under an excessive amount of pressure. So internationally if you're abroad, of course, it's harder for you to come and visit the lab, but you can e-mail. This is what I did. I simply e-mailed former students out of the blue. And this is totally fine because, in the same way that PI's need reference letters to accept you in their lab, you have the right to have someone talk about them before you choose your lab. Another thing that I think is really important is you have to have multiple options; you can't have only one plan. So you should contact multiple PI's and do the same level of research for all of them. Even if you have plan A, make a plan B because it might turn out that the one is not available at the time you need."

Sofia Jurgensen Hartke: "I had many questions in my mind regarding how to approach a PI, how to contact their former students, for example, and things like that. And I didn't know who to ask, because the colleagues I had in Brazil hadn't gone through that yet. What I did was I, actually NeurOnLine was starting, and I was invited to be a champion of NeurOnLine, so I started interacting with people through NeurOnLine. There was another post doc from the U.S., an American post doc, who was really willing to give advice in the post doc community about how you choose your lab. So I started exchanging emails with him and that was really helpful because he had gone through this process here and he pretty much helped me with all the questions I had."

Sofia Jurgensen Hartke: "...the best advice I can give to someone who is a trainee not only in Brazil or South America but a third world country or somewhere that is not in one of the main centers where research is done like the U.S., Canada and Europe is that you are in a small and limited community and you should seek as much as you can for some kind of interaction abroad that

international scientists. So take all the opportunities that you have to travel to international meetings, there are several fellowships you can apply so this is very important even if you don't ever plan to leave your country it's very important for your formation as a scientist."

What are some elements of a successful postdoc experience?

Jean-François Gariépy: "...you have to make contributions to science that are original so don't try to be just a follower. Make your own ideas how do you see the future of neuroscience, how do you see the future of your particular field. And don't necessarily try to catch the current wave; try to think about the next wave. Try to think about what neuroscience could look like in twenty years, not next week. And if you can find a way to create new ideas that are pertinent in today's neuroscience, I think you can only deem that a success."

Sherilynn Black: "I think that one of the most important components of having a successful postdoc is being matched with an extremely strong mentor. So my postdoc adviser Kafui Dzirasa not only is someone that was extremely relatable and easy to talk to, he was extremely supportive and nurturing of my career. And he also had lots of conversations with me about my strengths and things that he thought would promote me to the next level. And I think that if you have someone like that that, that's really 100% proactive in terms of getting you to the place where you need to be, then that, in turn, will allow you to be very successful later on."

Penny Dacks: "I think I've been very lucky with the mentors in my career so far. Both my Ph.D. advisor and my postdoctoral advisor are really wonderful scientists and they're very much, I think, legitimately interested in my career success and my happiness as a scientist and as a trainee."

Penny Dacks: "I think there are two really important things to do in any mentoring relationship. No one can mentor you well, unless you communicate. So if your mentor doesn't understand what your real passion is, what your real issues are, then they're not going to be able to give you the best advice. So, I would say, open communication is really important and I would also say that trust is really important because by that same token I think it's important to have mentors that you can openly acknowledge. Whatever issues you have, I mean, for example, anybody who might be considering leaving academia; there's some people who will not encourage that and you have to have a mentor that will not judge you for that and is going to find whatever career path is going to make you happiest and not perceive it as just giving up if you choose to go a non-academic route. And by that same token if you are staying within academia and you are having issues with your advisor or maybe your science and trying to plan something out, your mentor has to be somebody you really trust"

What can postdocs do to get the most out of their fellowship experience?

Jean-François Gariépy: "stay intellectually open. Don't be closed; don't think that everything is ruled out in your field. Try to seek that openness from learning from many different fields. You can read, you can look at literature, cinema, we have a wonderful world of possibilities, from the scientists who are producing new ideas up to the engineers that are constantly making their product evolve and we have to get a little bit of all that. We have to remain open because those ideas coming from other fields can help us make better ideas for our own."

Sherilynn Black: "... when I got to my postdoc, I really sort of took initiative and did my best to be as creative as possible to show all the other people that would be considering me for jobs later on that I had the ability scientifically to do what it took to make it to the next step. So I really tried to take much more initiative to make sure that I was not only being more of a leader of my own scientific ideas, but more of a leader even in the lab environment, showing that I could be one day be principal investigator. So I think that, you know, as a postdoc coming in being assertive, being independent, and scientifically creative are all really important things to consider."

What are some challenges postdocs face as they plan their careers?

Penny Dacks: "Most of us who are postdocs, have the goal of being a research faculty within academia but the truth is that there are not that many positions available given the number of postdocs. And the response to that is most postdocs then focus so much harder on the science and really work so hard at the science and get those big papers, which is wonderful, and that's important. But whatever career path we go to, whether it be the academia or outside of academia, we need other skills and it can be difficult to prioritize and take the time away from our science to develop those other skills."

Sofia Jurgensen Hartke: "...I think the greatest challenge for a post doc nowadays is beyond the obvious of being extremely productive and producing fast is, at the same time, managing to become independent and also to plan your own career because this is something that most people were not taught to do during grad school or even undergrad and they're not even aware that they

have to start planning their career. They usually think about it when they're almost done and then that might be a little late. So I think the greatest challenge is balancing all those things, being extremely productive at the same time planning your career and your independence."

Sherilynn Black: "...when you're in the postdoc phase it can be easy to sort of stay in the same place perpetually and sort of wait for it to see kind of what's going to come along; and there are difficult job prospects right now, but I think that it's really important to consider who you are as a person, what unique skill set you bring to the table that might separate you from other scientists and use those skills as you're preparing for the next stage of your career."

Jean-François Gariépy: "I would say that one of the main limits to me is create new ideas and I think that people don't work enough on that side of things. I'd like to hear people say that the big limit is the kind of concepts that we have in science right now and how we can make those concepts evolve and work to actually test some of these hypotheses at the brain level. I think that's what's limiting the progress of neuroscience, it's our own imagination and the way we frame questions."

For more information about various career path choices, please visit www.sfn.org. Continue the discussion and network with other neuroscientists on [NeurOnLine](#)