## Things Nobody Told Me about Being a Pl

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## Things Nobody Told Me about Being a PI - Part 3

Welcome back to the blog series "Things Nobody Told me About Being a PI". In part 1, we covered financial/administrative management. Part 2 dealt with personnel/team management. In the final installment, I would like to touch on an issue which was a big personal adjustment for me.

Something that was completely unexpected for me as a new PI was a sense of loneliness. As a post-doc, you are probably used to working in a busy lab, maybe in a bay of 2-3 other trainees all bustling around doing experiments. This builds a sense of comradery as you bond over failed experiments, talk about exciting new papers, and maybe plan what beers you are going to try at happy hour that afternoon. As a new PI, you often spend a lot of time alone in your office - writing grants / papers, attending to the masses of incoming email, and handling all your regulatory protocols. Even though you might be surrounded by people running around in the lab, and even other PIs down the hall, the relative silence was something unexpected for me. Dr. Katherine King (Baylor College of Medicine) also found a similar situation when starting her own lab;

"For me one of the biggest unexpected changes was getting used to a different work environment. As a postdoc I was used to spending long hours at the bench, frequently in the company of other trainees in the lab. As a PI I found that I needed to spend many more hours alone in my office writing grants and manuscripts. To combat a sense of isolation, I found it useful to network more with other junior PIs by meeting occasionally over coffee or a beer."

To try to combat the isolation, I often just walk around the lab and chat to trainees to see what they are working on that day, or talk about particular experiments. Also, I still spend about 25% of my time at the bench. I like to do this not only to break up the monotony of writing, but I genuinely enjoy doing experiments and this gives me a chance to build comradery with my trainees. I like to help them out when they have big mouse takedown days, just sitting with them at the bench chatting about nothing in particular helps me get to know them more personally. Another good bench exercise I like is to try experiments that aren't tied to a particular project, just random ideas I have from maybe a new paper or talk I have just seen. Giving these types of experiments a go with my own hands not only satisfies my itch for benchwork, but also does not overburden my trainees with things that might not work.



This last point leads me to my final issue for this blog that you are going to be confronted with when you start your new lab. This was also raised by Dr. Sergei Doulatov, PhD (University of Washington);

"A major decision in starting a lab is what research directions to pursue. To continue research directions initiated during postdoc or to establish a new path?"

As mentioned by Dr. Doulatov's comment, this is a situation faced by many new Pl's. The advantages with maintaining a continuous line of research is that you are familiar with the techniques and likely have developed some "street cred" in the field, while the drawback is that it may be harder to establish a research track that separates you from your mentor. The advantage to pivoting fields is that you have a chance to carve out a new niche for your independent research, but the disadvantage if you have no history in that area is that grant reviewers might not believe you can actually do what you propose until they see it in a publication. The way I have approached this is to have some "bread and butter" projects, things I know are going to work from a technical perspective based on my expertise, mixed in with some more high-risk discovery type projects that hopefully push us in new directions. But again, this will be different for every individual situation and dependent on many factors such as your relationship with your previous post-doc mentor, the research portfolio at your new institute and technological expertise of your trainees.

But all in all, there is no standard template to follow as you establish your own lab, no cheat sheet for steps to success. Each Institute will present its own unique set of circumstances and there will be a steep learning curve as you transition to your new position. That being said, the first few years of starting up my lab I found to be the most exciting time in my research career. Even with all the hidden stressors, for the first time you are completely free to pursue whatever it is you want to do, most of the time nobody will really be looking over your shoulder telling you which projects / experiments to go after. This is simultaneously both incredibly exhilarating, but also slightly terrifying. There is no safety net now! The purpose of this series of posts was to make trainees aware of some things to consider when starting a new lab that they might not have thought of. Hopefully, this can help ease some of the growing pains and help you set out on a successful research career.

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