

# My Journey from Graduate Student to Post-doc

By Mindy Levine

In March of 2007, I began my journey of attempting to find a post-doctoral position. At the start, I received this discouraging advice from a colleague: “If you think this is tough, don’t worry, finding an academic job is even more difficult.”

Nonetheless, by August of 2007, I had secured a post-doc position in the research group of Professor Timothy Swager at MIT. In July of 2008, mere weeks before I was scheduled to start my post-doc, I obtained an NIH postdoctoral fellowship. I write this article to give some advice to others who might be embarking on a similar journey, in the hope that they will also be successful.

1. *Start early.* One of the best pieces of advice that I received on obtaining a post-doc position is that it is never too early to begin your search. The sooner you begin, the more time you have to follow up with professors who do not respond to your initial inquiry, or to schedule lab visits or interviews. Additionally, the sooner you obtain a position, the sooner you can start applying for fellowships (see point 5). In my case, I started looking for a position 14 months before I anticipated finishing my Ph.D.

2. *Choose a mentor with slightly different expertise.* Funding agencies as well as future employers want to see that you used your time as a post-doc to develop new expertise, learn new techniques, and gain new knowledge. When you apply for external funding, often the funding agencies will ask you to justify why you chose the mentor that you did, and what you hope to learn from your post-doc experience. If you choose a post-doc mentor in precisely the same field that your graduate research was in, then it is going to be hard to justify that decision.

3. *Follow up.* Professors are notoriously bad at replying to emails. If you do not receive a reply from a professor you have contacted, it is easy to assume that the professor was not interested in your application and decided not to bother emailing you a rejection. This is most likely false. What likely happened is that the professor received three applications the same day he received yours, put them all in a pile to review later, then forgot about it. Or the professor was waiting to hear from a funding agency about grant renewal, put your application in a pile to review after he heard from the agency, and forgot about it. Or he was going to read your application, then a student came to his office, so he put it aside, and forgot about it. If you do not receive a reply from the professor after a few weeks, send an email. Remind him that you still exist and are still interested in the position.

4. *Get guaranteed funding from the professor.* The professor will likely want you to apply for external funding from a variety of funding agencies. This is a process that should be taken very seriously (see point 5). However, the funding for your position should be guaranteed regardless of whether you obtain a fellowship. Applying for, and receiving, an

external fellowship is a very difficult, capricious, time-consuming process. If you do not have guaranteed funding from the professor, and you do not receive an external fellowship, you are going to be in trouble.

5. *Apply for fellowships.* There are countless opportunities to apply for external fellowships, especially if your research is related to biological or medical research. Take advantage of these opportunities; apply for as many of the fellowships as you can. Do not get discouraged when you get rejected. Read the rejection summaries, make adjustments to your research proposals, and apply again.

You can apply for fellowships as early as a year before your anticipated start date. Before you apply, you must know whose lab you are going to, so that you can work with that mentor to develop a coherent research proposal that fits with the goals of the lab. This is another reason why it is critical to start applying for post-doc positions early.

Understand that the process of applying for external fellowships is tremendously time-consuming. You will likely be working on them at the same time that you are trying to finish your graduate research, write your thesis, and satisfy any final remaining requirements. However, if you are successful in obtaining a post-doc fellowship, that success will stay on your CV for the rest of your professional life.

When you apply for your first academic job, universities will look at your success in obtaining post-doc funding as a good indication that you will likely be successful in obtaining funding in your career. This will hopefully improve your chances of finding an academic job (or so I've been told; as I am not yet at the position of applying for academic jobs, I cannot comment definitively).

You can continue to apply for fellowships (in most cases) until a year after you have started your post-doc. The following is a list of post-doc fellowships that I applied for:

- (a) National Institutes of Health (NIH)
- (b) American Cancer Society
- (c) Damon Runyon Cancer Research Foundation
- (d) Helen Hay Whitney Foundation
- (e) Jane Coffin Childs Memorial Fund
- (f) National Geospatial-Intelligence Agency
- (g) National Science Foundation (NSF) - American Competitiveness in Chemistry Fellowship

Some of these fellowships give a lot more money to post-docs than I was promised by my post-doc mentor; others, like the NIH fellowship that I obtained, give less. Each fellowship has unique formatting guidelines, supplementary forms, statements of career goals and aspirations, etc., which will take time to fill out correctly. Luckily, you can probably use the same basic proposal for multiple fellowship applications, slightly re-tooled to meet the aims of each funding organization.

If you are just starting this journey, or if you are at any point along the way, I wish you the best of luck for a successful and happy ending.