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Allison McClure studies DNA replication at the Francis Crick Institute in London.

A POSTDOC'S GUIDE TO CHOOSING THE RIGHT LAB

A first-hand take on securing a postdoctoral position and on how laboratories can attract candidates. **By Allison McClure**

After I finished my PhD in 2014 at Duke University in Durham, North Carolina, I stayed for an extra year to finish a paper and look for a postdoc position. The first step of my process was to decide what I wanted to do with my career, so I could find a laboratory that would help me to achieve that. It can be hard to answer this question because you really need to know yourself and reflect on what you want. I was a bit apprehensive about making such a strong statement about my career – a feeling that I think is shared by many graduating students. But, I decided that I wanted to try to stay on the academic track, so I needed to find a postdoc

position that would support and help me to prepare for eventually becoming a group leader.

The next step in my process was to broadly identify what type of field I wanted to work in and which techniques, system and organism I wanted to learn. Several people advised me to change one or two of these choices from my PhD work, which was in yeast cell biology. Although I really value having experience in multiple fields and techniques, I don't think this change is absolutely necessary. I've seen many postdocs develop successful careers without changing paths. Again, this requires self-reflection to really identify what fields,

techniques and systems you care about. I also talked my options through with my PhD adviser, Daniel Lew, and my lab mates. I read a lot of papers to get a feel for different areas. In the end, I decided to stay working with yeast but to take on more of a biochemistry approach.

I then put together a list of possible labs as I read papers and perused university and institute department websites. By this point, my partner and I had decided that we would like to live in Europe, because it would be a great opportunity to move somewhere else and experience a different way of living. I prioritized labs in Europe, but I included many in

the United States as well.

The hardest part was making a shortlist. On top of considering each lab's research focus and location, I also spoke with my PhD adviser and my thesis committee about the reputations of my chosen institutions and labs. I also received some advice at this stage that I really encourage all potential postdocs to consider: go to a lab with the intention of learning their field and the techniques that they specialize in. Don't try to learn a completely different technique that is tangentially related to the main work of the lab – I've seen this derail many postdocs.

I applied to eight labs by cold e-mail: four labs in the United States and four in Europe. The cover letter (e-mail body) is really important – think carefully about what you want to say and make it personal. I had four initial half-hour Skype interviews, and I was then invited for three in-person interviews, which took place in Geneva, Switzerland, London and Edinburgh, UK. I arranged to combine those last two locations in one trip, and the labs covered the costs.

The postdoc interview

I was intimidated by the prospect of travelling on my own to the interviews, particularly as a young woman. I experienced a culture shock on my first trip, I was completely baffled by Geneva's public-transport system, despite having researched it beforehand. Then, my Airbnb host thought I was arriving in the morning instead of the evening (I was using a 12-hour clock instead of a 24-hour clock), so I had to wait outside for a long time. It all worked out in the end. Both my Airbnb host and my lab hosts helped me to navigate the city and enjoy it.

Some of the other experiences I had on my trips were much more positive – I loved all the fresh food and restaurants. Also, conversations about life as a postdoc were different. Someone actually laughed when I asked about health care and insurance because it's a completely different system in European countries compared with the United States. Despite all these differences, the moment I stepped into the Geneva lab for the interview, I felt more comfortable. Science is pretty universal, and I found that I could easily fall into conversations about science with the people there.

In all of my interviews, I gave a seminar about my PhD research. Usually people from my host lab attended this, as well as people from other labs in the department. Then, I met one-to-one with the lab leader and other lab members. Sometimes I met with other faculty members or people running core facilities. Often, I would go for a meal or two with the current students and postdocs and would get a full tour of the facilities and the campus.

I found that giving a really good seminar presentation makes a big difference. Your

interviewers won't expect you to know everything about their research, in my experience, but they do want to make sure that you are well-versed in your own – that you can answer questions about it and that you are engaged with it. Also, make sure you read the most recent papers from their lab and that you're familiar enough with the basic ideas of their research focus, so that you can have a good conversation about it.

Try to remain calm, even if it's just what shows on the outside. I'm always nervous before an interview, but you have to find what works for you to get through those nerves.

One thing that helped me was to find a private space before the start of the interview (usually a bathroom or an empty room) and open my arms wide. It helped me to open my body language and pretend that I wasn't freaking out inside. Then, usually, I would calm down as the interview began and as my mind became engaged with the content of the seminar or conversation.

Making the right choice

In the end, I received two offers and decided on John Diffley's lab at the Francis Crick Institute in London. During my interview, I had great conversations with both John and the other postdocs, which was important to me. I wanted to find people that I could talk about science with, in a productive and comfortable way and to have a supportive environment rather than a competitive one. I'd had some bad experiences before I joined my PhD lab, and I wanted to make sure that didn't happen again.

I could imagine how I would develop as a scientist in John's lab and ultimately gain more independence. When you're on an academic career track, that's a big part of the experience – becoming independent, designing your own projects and looking towards the future in terms of how you're going to establish your own lab some day.

About the institution

In addition to reading papers to identify potential postdoc labs, I relied on institution and lab websites for information. I think many institutions and labs could attract more postdoc applicants by improving their websites – a good online presence makes it easier for people to find out more about a lab and decide whether they could fit in well there.

I also think institutions should offer longer employment contracts. Science is hard, and it takes time to get data published and to prepare for your next career steps. I've heard of some institutions using one-year rolling contracts, which can be stressful and doesn't provide any job security to a postdoc. I am glad that the Francis Crick Institute offers a four-year contract with a possible two-year extension. This has given me the time to publish papers and prepare for my next career move. I'm now in a great position and plan on opening my own lab as a group leader next year.

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A LAB LEADER'S GUIDE TO HIRING A POSTDOC

It's worth waiting for the right postdoctoral researcher to come along, but how do you choose the best candidate? **By Caroline Hill**

I want to hire people who are really driven: love doing research, love the science, are innovative, ambitious and motivated. Above all, people who are excited by the work that we do and want to be a part of it.

Vacancies

When I have a specific vacancy, I tend to advertise it on FindAPostDoc, Nature Careers, LinkedIn and Twitter. Social media has become a good place to find candidates. On Twitter, potential postdocs can see what papers are coming out of the laboratories that they

are interested in. It's a good way of knowing what's going on. Another thing I have found that works well is using field-specific websites. For instance, for a current opening in my lab at the Francis Crick Institute in London – where we work on zebrafish (*Danio rerio*), a developmental organism – I have been advertising on the Zebrafish Information Network (ZFIN), an online community resource for researchers with an interest in zebrafish. I also advertise on the Node, a global community site for developmental and stem-cell biologists.

I forward job adverts on to colleagues in my