



Picking a postdoc

If you have decided that a postdoc is the next step after graduate school here are some key elements to consider:

- **Advisor:** An advisor's reputation, location and science are all important to consider, but you also should ensure that you and the potential advisor are compatible. Here are some things to look for:
 - **Mentoring style:** How often will you see the PI to discuss science? Rarely, and thus you have no direction or too frequently, making you feel micro-managed. Realistically, you would like to fall in the middle, but which could you tolerate more?
 - **Record:** Understand where they publish, the stability of their funding, and if you are expected to secure your own funding. Consider the pros and cons of both tenured and tenure-track investigators.
 - **Your Career:** Pick an advisor that will support your career, no matter what you want to do next. Where have former lab-members taken positions? Consider if your advisor has a network with the career that you are considering.
- **Project:** What will your project be and how much can you define it? Also, assess if the project has built-in skills development for you to learn new techniques and write grants. Is it interesting to you? Would you like to continue in the same field as your graduate work (faster to publish but may not expand your skills) or a new field (slower to publish but may offer you a new skill set or a scientific field that fits your interests).
- **Lab Mates:** Big lab or small lab? What is the work culture, work-life balance and the average length of a postdoc in the lab? Where have past members gone after leaving? Can you see yourself working with these individuals on a daily basis? Are they social outside of the lab, and is that important to you?
- **Institution:** Does the institution where the lab is based have career support in the form of a postdoc office or association? You will also want to know the standard pay scale and benefits for postdocs and whether that is negotiable. Also, don't forget about your science and determine if the institution has facilities, such as core groups, that will support your research.
- **Location:** Big city or small college town—one likely fits you better. If you have a family (or are hoping to start one), their needs are important to consider as well. Will your salary be enough for you to live?

How do you find a postdoc? Most postdocs are found by direct connection with the potential new advisor. Some may be listed online, but many, many more come from direct contact with a potential new boss. *So, how do you find a new advisor?*

- Publications: Whose work are you reading? If you read things outside of your field, what are you reading?
- Seminars and Conferences: Think about people who you have met at conferences or who have come to do seminars in your department. Has their work or enthusiasm for science impressed you?
- Network: Ask other faculty members you know for recommendations. How about postdocs in the lab - would they recommend any faculty members from where they went to grad school or other people they know?

How to apply: Since most postdocs are found by a science connection, it is possible that potential postdoc positions are never posted on an online job board. Many people looking for a postdoc start the process about a year ahead of time.

Typically the “application” is an email to a potential advisor. This email will state why you are looking at their lab (and perhaps who recommended them). You will then discuss that you have read their science and why it is interesting to you (this is the most important part to let the potential investigator to know that you understand their work and that this is not just another spam letter). You can then talk about how your past research may fit in to the new group. You should close asking about potential positions in their group. You may also want to mention your timeline, so they can think about openings in the future.

What should you expect during a postdoc interview? Typical interviews are a full-day long event. You will likely give a seminar, either to the entire department or just the lab (you should ask who the audience will be). You will meet with the PI to discuss potential projects, you will tour the lab and facilities, you will chat with lab members. You may/may not meet with other faculty members. You will likely eat meals with the group, and have some social time with just members of the research group. Typically, interviews are paid for by the research group.

What does a postdoc advisor expect from a new postdoc?

- Independent thinking: By finishing graduate school, you have proven that you can complete a project and think on your own. Your new supervisor will expect that you will come to the research group and contribute new ideas, not just to your own project but other projects in the group as well.
- Project Management/Time Management: You should be able to lead a project and direct your own research and time. You should be able to drive the project that you have been given.
- Faster time to publication: Since you do not need to learn the basics of science, you should be able to publish faster (provided your project works).
- Ability to supervise a student/tech: Being a postdoc is the perfect time to start gaining management skills by supervising younger members of the group.

- Possibly finding your own money: You should understand the expectations of your new supervisor and if you will need to secure your own funding through grants or fellowships.

Find additional mentors: It is always recommended that you find additional mentors that can help you with your career and your science. This is a terrific way to gain multiple perspectives to ensure you are heading in the right direction. This is not an additional boss, but rather another person who can give you practical and honest advice. Additionally, having more than one mentor gives you more people to write letters of recommendations as you finish your postdoc.

FAQS to finding a postdoc

Can I stay in the same lab, or the same institution? It is common that your first postdoc would be a short stint in the same lab as you finish up any remaining projects. Normally this does not last more than one year (and typically much less). After that you will want to diversify your experiences by finding a new lab. Staying at the same institution is a bit different. Finding a new institution gives you the ability to experience science in a new setting. But sometimes you may need to stay (family, financial, or you just really like it). In this case, it is recommended to at least find a new lab, perhaps even in a new department so you gain the independence that a postdoc needs.

Do I really need a postdoc? This depends on your chosen career path. If you want to be an academic faculty member, you will almost certainly need a postdoc. If you would like to go to industry R&D, a short postdoc might be necessary to be competitive with other applicants. If you would like a non-research position, a postdoc may be unnecessary---but---you would have needed to start preparing for this career path as a graduate student so you have the credentials to make this career switch.

If I start a postdoc and hate it, do I have to stay? This is one of the best things about being a postdoc, if you hate it you have more flexibility to move on than you did as a grad student. Since there are no degree requirements, you have the freedom to choose your own path. If you are in a postdoc you do not like seek the advice of your other mentors and the postdoc office to navigate switching research groups.

Can I get teaching experience as a postdoc? Maybe. This is something you and your advisor should discuss. Teaching experience will also be your responsibility to find opportunities by connecting with colleges and universities that will help you gain these experiences. (unless you are doing an IRACDA postdoc: <http://www.nigms.nih.gov/Training/CareerDev/pages/PartInstlIRACDA.aspx>)

Does the institution/research group I go to make a difference? Maybe. This question really is asking: will the pedigree of my advisor make me more attractive for a future job? This depends on what you want to do next, but it could be a factor in your decision. Even if you use pedigree as one of your decision factors, we also strongly recommend that you consider the mentoring style of the advisor and how their mentoring will fit into your long-term career goals. Pedigree means nothing if it means you are going to have a miserable experience.