Postdoctoral positions are a common, and often necessary, interlude between graduate study and tenure-track life. The experiences and training gained from a postdoc can shape the rest of your career. Yet it can be challenging to find out even the most basic information about such opportunities.

As postdoctoral fellows in a federal research center, we would like to share some of the resources we have found useful as well as offer advice that may help you make the most of your postdoctoral experience.

**Not just a research job.** No two postdocs are alike since they vary by time frame, scientific field, location, goals, and expectations, among other factors. However, one aspect common to all fields is that a postdoc is not just a research position; it's an opportunity to develop and enhance your technical skills and your career prospects. Knowing what you want to achieve during your postdoc—and clarifying your advisor's expectations as well as your own—is a key first step.

**Make a plan.** Early in your postdoc, discuss, prioritize, and write down the goals that both you and your advisor hope you will accomplish. That includes research goals, such as the number of publications you hope to write or co-write, and other professional goals, such as teaching experience, organizing a symposium or workshop, writing a review paper, or improving your grant-writing skills. Make sure your plan takes into account your personal and family responsibilities.

**Get a head start.** The key to a productive postdoc is often a quick start. Using available data sets and collaborating on existing research can be a good way to boost your publication record while waiting for your own new data. That can also be a good time to write meta-analyses and literature reviews. Your advisor is likely to have valuable advice on those processes. You might also consider developing side projects that are extensions of your research and capitalize on resources available at your institution.

Preliminary data are essential to attract money for your research proposals, and we recommend writing your own grant proposals. Tailor them to the specific goals of the grant agency. If you can obtain a grant that would travel with you to your next job, then you are well on your way to landing that job.

**Take advantage of professional-development opportunities.** University and government institutions often provide subsidized workshops and seminars for improving technical and communication skills. But other programs are available, too. Make yourself known to your grants offices and library. Networks like the National Postdoctoral Association hold annual
meetings that offer both information and contacts. Travel grants are available to help you attend the NPA conference (see www.nationalpostdoc.org).

You can improve your teaching skills through programs such as the Faculty Institutes for Reforming Science Teaching, which focuses on improving undergraduate biology education. Direct teaching experience in a local college, university, or community college is also valuable. Many adjunct positions are available that allow you to organize and teach a complete course, not just a lab section or a guest lecture. Often these positions are advertised in e-mail discussion groups; for example, a major group for people in environmental science and ecology is Ecolog-L. Ask colleagues in your department or laboratory which online groups you should participate in to hear about potential training opportunities.

**Find a mentor.** It should be someone you respect, regardless of their field or position, and someone with whom you meet on a semiregular basis for advice and support. It doesn't have to be a formal arrangement, although you may receive more attention if you request your mentor's active involvement. Voicing your ideas, achievements, and worries with someone else can provide valuable insight about your career progress and can help you alleviate self-doubt, which is not uncommon among postdocs. If you don't have a mentor in mind, try using a national program called MentorNet (www.mentornet.net), which helps link graduate students, postdocs, and professionals. You might also consider becoming a mentor for a rising graduate student.

**Two brains are better than one.** Postdocs are a great time to begin collaborations that could last a lifetime. Talk to people around you, including peers and other principal investigators, and not just those in your lab. Find areas of common interest that could develop into proposals and projects.

Attend conferences as much as possible. Besides giving you a chance to show off your research, the social opportunities are key to building your network. Those connections could lead to research collaborations, job openings, or valuable friendships that you will treasure throughout your career. After all, nobody knows what you're going through better than other postdocs.

**Go international.** Overseas experience is a fantastic way to discover how science works in other countries and cultures, and to appreciate how the focus of science may vary depending on the issues that different countries face. Since moving overseas can be challenging, it is worth investigating whether fellowships offer assistance with relocation expenses and visa troubles. People at your host institution may be willing to help you settle in.

**Network online as much as possible.** Hiring committees usually search the Web for information about potential candidates. It's imperative that you take time to create a professional-looking Web site with information about your research, teaching, and publications. While most universities will offer you space for a Web site, you may acquire one on your own.

Check first with your institution's IT office. Most will have software and other resources to assist in the creation of a Web site. In addition, there are many free templates released under the Creative Commons license (see, for example, freeCSStemplates.org) to help you design an appropriate Web site.
You might also consider opportunities for making your research available to the public, such as setting up your own blog and taking advantage of online networks such as LinkedIn that may help you locate a job or collaborator.

Think carefully, however, about how you use social-networking media (Facebook and the like), where the information you post may be more public than you realize.

**Learn how the hiring game works.** If your goal is to obtain a tenure-track position, you need to know the basics: how to find those positions, how to be a competitive candidate, how to prepare a CV, and how to conduct yourself in an interview. Asking other postdocs and your advisor for advice is a useful first step.

Spend time personalizing your application for each institution you apply to. That takes time but is necessary for a successful search. Subscribing to job networks and forums is a good way to keep an eye on the market throughout your postdoc.

Alternately, you may decide that academe is not for you, in which case you will need to broaden your job search. During your postdoc, be on the lookout for other nonacademic opportunities that interest you in government or the private sector. Consider applying for fellowships that allow you to explore nonacademic career options.

Timing is also important, since there may be seasonal employment periods, and some positions (such as government graduate and fellowship positions) can take months to secure.

**Balancing work and life.** Postdoctoral positions are often undertaken by people in the process of starting families and planning their futures after years of study. Before you accept a postdoc, we recommend you ask questions about benefits included in the position and about any policies related to parental leave. The National Postdoctoral Association Web site provides suggested policies as a useful starting point. Postdocs typically involve long hours. Set boundaries between your professional and personal life (as hard as that can be to do), and develop habits to improve your efficiency, enabling you to spend quality time with family and friends.

**Have a life!** It's important to have at least one hobby or outside pursuit that you do just for yourself, to keep you motivated and refreshed. Particularly as the length of time spent in postdoctoral positions increases, it is important to keep a healthy work-life balance.

Good luck and enjoy the journey.

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