



## How to Have a Successful Postdoc Experience and Get a Good Job

Congratulations. You have your Ph.D. and are one of the most highly educated adults in our society. You have proven you are smart, independent, and motivated, and now you're starting the next stage in your career development. Presumably, you have used your skills to research this new position and have some sense of what it is you want to learn and accomplish over the next three to four years. You have made a significant decision in choosing this postdoc position. Your Ph.D. ensures that you will have other opportunities to make significant career choices. Remember that being a postdoc is not a job—it is a transitional training opportunity en route to independence and, eventually, a “real job.” With your advisor, you can determine a path to attain both your research and career goals—but you have the primary responsibility for your success.

There are excellent published and web resources to guide your career development; some are listed below. Here we consider three well-defined goals that constitute prerequisites for successfully completing postdoctoral training. With hard work, determination, and a little luck, you can accomplish these.

### Goal 1: Set a Clear Plan

Decide where you want to be four years from now. If you don't know where you're going, how can you set a straight and efficient course to get there? The sooner you choose a career path (e.g., academic or applied research, teaching, journalism, science advocacy) the better, so that you can get the training and qualifications and make the contacts you need to get where you want to go. Your objectives may not be the same as your advisor's, but if you want your advisor's help, it's a good idea to make sure that you are both pushing in the same direction. Doing so requires honest self-evaluation (see March 2007 Women in Cell Biology column, “Your Career Plan...”) and career discussions with your advisor. What aspects of science are

you passionate about? Are you creative? Do you like benchwork, or do you prefer reading and assimilating information from the literature? Do you like working as part of a team? Do you want to cure a disease or develop a drug and save the world? Do you like to teach? Are you a risk taker, or are you more comfortable with a clear path? It's okay to learn the answers to some of these questions during your postdoc training, but the sooner you know them, the easier it is to set the best course.

### Goal 2: Finish One Significant Project

This is the time to successfully tackle a very difficult, important, and/or novel problem. Determine the single important question you're addressing and how it fits in the context of the field. Then decide what data are needed to tell a compelling but well-defined story. “Finished” means “published.” Make good strategic decisions: Home runs are great, but don't pass up the base hits. Also, don't get bogged down for years fighting to try to get your paper into a “sexy” journal. Together with those 12 supplementary figures you might well have material for two or three excellent

papers in *Molecular Biology of the Cell!* Learning to write well and communicate your ideas and findings effectively is essential. Writing and publishing papers proves your capabilities and makes you a stronger job candidate for any prospective employer.

### Goal 3: Establish Your Identity

In addition to publishing your research, present your work whenever possible at departmental retreats, poster sessions, and minisymposia. At meetings, don't be a wallflower. If you don't say anything, the assumption will be either that (a) you don't understand what's going on or (b) you don't have anything worth saying. Silence is never taken as a sign of wisdom and knowledge. Collaborate with and contribute to other projects. To establish your expertise, others

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must benefit from it. You will need three to four letters of recommendation for an academic job, so talk to other faculty members and colleagues about their research as well as yours to try to find a connection.

### Completing Big and Small Tasks

Achieving these goals and getting a job are the ultimate desired outcomes of your postdoctoral training. Keep them in mind and stay pointed in their direction, but break the journey up into smaller, doable steps. Plan short-term objectives for daily or weekly focus; these may include composing your daily experimental plan and to-do list. Creating a paper outline or plan early on can help you meet intermediate-term objectives of outlining, writing, and submitting your next paper. The intermediate-term objectives will take months to complete. Meanwhile use your group meeting presentations to prepare seminar-quality slides, and compose your job talk month by month as your work progresses. Step back and evaluate your progress regularly. Are you on track?

Attending seminars can play a significant role in achieving each of these goals. Seminars provide an opportunity to expand your knowledge efficiently and effortlessly. At the same time you can learn communication skills from others' successes and mistakes. You might also learn something that could help your research: a new method or approach, a relevant paradigm. By asking questions, you will be noticed and thereby establish your identity in the research community. You'll also learn good interviewing skills, which involve hearing about *others'* research and engaging *them* in meaningful conversation about it. Make sure you meet the famous scientists who give seminars. They will be hiring!

### Funding Eases the Way

Independent funding increases your freedom and security. Write a grant proposal, even if your advisor can fund the project. No matter what direction your career takes you, you will always need to plan ahead and justify your experiments—skills that are learned from grant writing. Some grants will ease your transition to an independent faculty position. These include Career Development Awards from the Leukemia and Lymphoma Society, the Department of Defense, or the Burroughs-Wellcome Fund. The National Institutes of Health offers the K01 Mentored Research Scientist Development Award, the K08 Mentored Clinical Scientist

Development Award, and the new NIH Pathway to Independence (PI) Award (K99/R00); both provide promising postdoctoral scientists mentored and independent research support. Apply for these as you consolidate your future plans and experience *success* (i.e., have published a paper), typically after two to three years. Make sure that there is good justification for continuing your training, because if your postdoc is not a learning experience, you may be wasting your time.

Don't trust your advisor to keep track of your career. Even the most caring mentor will lose track of time. Besides, given your experience and leadership abilities, mentors like having you around. Go on the job market when you've attained your goals and when you have a clear idea of what you want to do during the next phase of your career. For an academic job, this means having a clear idea of your independent research program; for a job in biotech, this means knowing your skill set, what you have to offer, and the type of work that interests you. If teaching is your career goal, then teaching experience is more important than a long list of publications.

Finishing a postdoc in three to four years requires commitment, focus, efficiency, and a little luck. You can't do it without working hard, but working hard doesn't necessarily mean working long: It means working efficiently, intelligently, and with determination. Apply the same intensity to your friendships, family, and recreation to stay balanced. But remember, people don't have balanced days, weeks, or months: They have balanced lives. Keep the destination in mind, set your priorities, and prepare to change them as your journey continues. ■

—Sandra Schmid and Sandra Masur  
for the Women in Cell Biology Committee

### References

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## Need a Good Woman?

### Women in Cell Biology Speaker Referral

Need a speaker for a meeting you're planning? Concerned about gender representation as well? Contact the Women in Cell Biology Committee (WICB) Speaker Referral Service for recommendations. Your response will be handled expeditiously and confidentially. Email [wicb@ascb.org](mailto:wicb@ascb.org). ■

## Searchable Resources

*Life Sciences Research and Teaching: Strategies for a Successful Job Hunt.*

[www.ascb.org/newsfiles/jobhunt.pdf](http://www.ascb.org/newsfiles/jobhunt.pdf).

[www.grantsnet.org](http://www.grantsnet.org)

■ extensive, searchable grant database

[http://nextwave.sciencemag.org/career\\_development/](http://nextwave.sciencemag.org/career_development/)

- links to funding opportunities
- great advice on grantsmanship
- career advice