

## TIPS ON POSTDOC PLACEMENTS: TWO VIEWS FROM THE FIELD

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### A Successful Postdoctoral Experience:

The elements of a successful postdoctoral appointment are as variable as the postdoctoral population. For one unabashedly upbeat postdoc on a laboratory fellowship (we'll call her Sue), these elements included early preparation, supportive colleagues, a fascinating research topic, the opportunity to learn time management and self-reliance, and an effective—though somewhat distant—mentor.

- *Early preparation:* Even as a graduate student in geochemistry, Sue began building ties to the research group where she wanted to go as a postdoc. “To get the most out of an experience, you have to offer something. I did my graduate work in geochemistry; I wanted to work with a group in planetary physics, and I was able to show them that I had something to contribute. I began doing some projects with them while I was in graduate school, so the transition was relatively smooth. One of the best reasons to do a postdoc is to learn a new field, but it's best to prepare the ground early.”
- *Supportive colleagues:* “I didn't always know where I was going, but it was fairly easy to seek out good advice and constructive criticism both in my own institution and elsewhere. A big challenge, and a difference from graduate school, is that you've got to start putting together your own professional network of collaborators and friends with whom you're going to be building your career. It's a good habit to spend time every week meeting new people, networking, looking at people who are successful to see how they do it.”
- *A topic of interest:* “I loved my work, and this is one reason it was successful. I published 12 or 13 papers during three years as a postdoc, including one in *Science*. I got to work on a variety of problems without getting stuck in something too narrow. I was fortunate enough to have a great deal of freedom. I could follow my curiosity, and that allowed me to be very productive. I had the opportunity to propose my own research and get it funded. ”
- *Learning self-reliance:* “I spun my wheels for the first few months, trying to figure out what to do first, but there were some advantages to that experience. If you're going to be an independent researcher, sooner or later you 've got to learn to fly the plane. When I was a grad student, I used to do all my own instrument work, because my time was cheap and there wasn't anyone else to do it. When I became a postdoc, I was paid more and I had technical staff. I had a big adjustment in mindset about organizing better and making the wisest investments of my time. ”

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- *Effective mentoring:* “I saw my adviser several times a week. He wasn't very involved with my research, but what he did was right for me. He was always supportive, gave me a long leash, and made sure I got to give talks at important conferences. He did this for all his postdocs—made sure that certain doors were unlocked. What you do with that advantage, once you go in that door, is your business. Again, you're the one who's going to fly the plane. In the end, I was fortunate enough to be hired by the same institution where I did my postdoc.”

## A Difficult Postdoctoral Experience:

Joe, who has had two postdoctoral appointments in academic environments and now works in the biotechnology industry, says it can sometimes be difficult to anticipate—or prevent—a frustrating experience. For his first postdoc, he carefully chose an adviser whose project in the life sciences seemed to fit nicely with his own interests, but a series of difficulties blunted his productivity. He offers a summary of his experience, and some lessons he learned:

- *Know when to cut your losses:* In his first year, Joe tried several experimental approaches that failed to give results. His adviser was seldom in the lab to offer guidance, and Joe was slow to change direction. When he tried to consult other senior scientists, his adviser refused to allow it. “She felt this was interfering with her laboratory. In retrospect, I probably should have cut my losses and moved on. But there's great pressure to keep going, to tough it out.”
- *Understand your adviser's policy on publication:* In his third year, Joe had finally found a promising new direction, obtained results, and written them up for publication. His adviser, however, did not allow him to send out the paper because she felt it should be a “bigger story.” “The timing was critical for me. I had to be applying for jobs, and I had no publications. I was ready to have my work judged by my peers, and I was unable to do so. She finally rewrote and published the paper—after I'd left the lab.”
- *Talk with former lab members before signing on:* Joe talked only with current lab members, who he now knows are not in a position to be critical. Later he learned that he was the fifth postdoc to leave that particular lab without publications or jobs. “I should have talked with some former members, because they are freer to be honest. In a good training environment, postdocs are getting jobs and continuing their research. I might have saved myself a lot of difficulty.”
- *Be clear about your agenda:* He went on to do a second postdoc, with better—defined goals. “I needed publications, and I was frank about this with my second adviser. That lab was doing work in my field. I was offered a year's support, and after that I knew I would be on my own. It was a fair offer, and clear. After nine months I was able to raise my own funding. I got my publications, the work came out well, and I entered the job market in good shape.”

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