As you prepare to complete your PhD or your postdoctoral fellowship, one important decision to ponder is whether to enter industry or remain in academia. Many questions are probably running through your head. What are the advantages and disadvantages of each? If I enter industry, will it be hard to return to academia? How do I find a job in industry? Everyone says I should network, but what does that really mean? I will address some of these questions here.

**Industry versus Academia**

Why might you want to enter industry? What are the advantages? Many people are lured into the biotech/pharma industry from academia because of the higher salaries and benefits. Many want to escape the endless grant-writing that takes time away from performing actual research in academia. Others are enticed by the idea of seeing their work result in a marketed drug.

On the other hand, academia offers the freedom to work on the projects that interest you most. Some scientists in industry become frustrated when projects are frequently changed. Often they have no input on the future direction of their projects.

There is no wrong or right reason for choosing industry or academia. And there is no penalty if you enter industry and decide that you want to return to academia. Many academics now consult with biotech/pharma companies or have started their own companies on the side. So they will have no bias against you if you did enter industry and decide to return to academia.

**What Is Life Like in Industry?**

Each biotech or pharma company is different, but there can be some common characteristics. For example, in the three companies I have worked for, the hours were fairly regular. It was rare for people to work evenings or weekends. I received excellent benefits including a 401K and medical, dental, and life insurance. I found the environment to be more relaxed and collaborative than in academia, where everyone is striving for lead authorship on the next paper. In industry, you work as a team and you are rewarded as a team.

However, I have heard from others that the environment at some biotech/pharma companies can be similar to academic environments or worse. In some companies, employees regularly work long hours and are constantly under pressure to meet deadlines, leading to an environment that is more stressful than that in academia. If you pursue an industry position, it is okay to ask about the work environment during an interview.

**How Do I Find a Job in Industry?**

The classical way to find a job, which often does work, is to scour the want ads and apply to open positions. Many websites are dedicated to publishing open positions, including www.monster.com and www.careerbuilder.com. Several others are more science-based, such as www.biospace.com and http://sciencecareers.sciencemag.org. Often a company will list open positions on its own website.

However, most positions are not advertised. They are filled internally or through networking and personal referrals. Therefore, searching want ads for a job is a way to start but it may not land you the ideal job. An alternative, proven method is to narrow down the field and apply to selected companies. Then use your contacts to find people who work at those companies.

People have different opinions on cold-calling. Some feel that unsolicited emails or calls may alienate a hiring manager. Yet cold-calling may be your only option for getting your foot in the door. If you do cold-call, direct your emails and calls to the right person. Do not email the CEO of the company. Instead, target people in the department you would want to work in and who may be in a position to hire you. You can find these people through contacts you’ve...
made or by calling a company’s human resources department. Keep emails and calls brief. Do not attach resumes or cover letters to emails because many people are wary of opening attachments from strangers. Lastly, be explicit about what position you desire and what you can offer to the company. Cold-calling can be daunting; therefore, networking is often your best option.

**What Is the Best Way to Network?**

You’ve often heard the term, but what does it really mean to network? Networking is a way to build up your personal contacts. But how do you make contacts? First, be sure to have business cards. If you are a current graduate student or postdoc, give your status on the card along with your institution and relevant contact information. Often you can get cards free or discounted through your institution. If you are a recent graduate and are unemployed, put your specialty as your title. For example, if you graduated with a degree in biochemistry, list Biochemist as your title.

Once you have your business cards, one way to meet new contacts is at scientific meetings. Most scientific meetings host social events for attendees. Go to these events and try to interact with as many people as possible. Approach people and show interest in their work. This is not the time to solicit a job but rather to make acquaintances. Be sure to exchange business cards by the end of the conversation. If you are presenting a poster, ask for business cards from people who show particular interest in your work.

It is not only large national meetings that offer opportunities to make contacts. Don’t overlook the possibility of meeting people at local scientific meetings. Many communities have their own bioscience association that holds regular monthly or bimonthly meetings for scientists. Once, as a postdoc, I attended a Bioscience Forum meeting held in the Bay Area. It was a round-table seminar with approximately 300 attendees. I found myself at a table with a senior scientist at Genentech. He was immediately added to my list of contacts.

**How Do I Use My Contacts?**

First, if you acquire a person’s business card, it helps to write on the back where and when you met the individual. Keep a file of such business cards. Second, email the person within a week stating that it was a pleasure meeting him or her and that you look forward to meeting again or perhaps working together in the near future. Third, you can use a Web service such as LinkedIn to organize all your contacts.

One advantage of LinkedIn is that you have access to your contact’s profile and to all of his or her contacts as well. Be sure that your LinkedIn profile is complete because it will serve as your online resume for others to see. When you have targeted a company, you can search LinkedIn by the name of the company and it will show you people who work there. If a person is already in your network, you can contact him or her free of cost. Or you can pay a small monthly fee to contact people who are not already in your network. You can ask in a message if there are any openings at the company and if the person could keep you in mind if a position should open up. Again, target only those individuals who are in a position to hire you.

**What Should I Include in a Resume and Cover Letter?**

If you are still at a university or are a recent graduate you likely have a career center at your disposal. Have someone from the career center look over your resume. He or she can find spelling and grammar errors that you may have missed and can inform you on the latest trend in resume formats. If you don’t have access to a career center, send your resume to friends or colleagues in the field for editing.

It is okay to have multiple pages in your resume. However, if you are a recent graduate you should be able to fit most information onto one page unless you’ve had multiple jobs and internships. If you do need to condense, you can omit your list of publications and indicate that it is available upon request. You do not need to state that personal references are available upon request; this will be assumed. You also do not need to provide your personal references until they are asked for.

Tailor each resume to the job for which you are applying. For example, if molecular biology experience is a requirement of the job, list first all the experience you have in that field. Cover letters should also be tailored to each company. Keep them brief and include bullet points. Hiring managers are more likely to skim though a bulleted list of your relevant skills than through lengthy paragraphs. Include your contact information in both your resume and your cover letter. If you are sending your resume to a specific person, consider sending it as a PDF so that corrections and the source of the corrections are not visible to the reader as...
they may be in a Word document. (However, some companies prefer to receive Word files.)

What Are Interviews in Industry Like?
Congratulations! You’ve applied or inquired about a job and sent in your resume, and now you have an interview. What should you expect from the interview? Again, each company is different. Some may require you to give a seminar, similar to what you would give when applying for an academic position. Some interviews may last for half a day, while others may be the entire day including dinner. Usually you will receive an agenda that lists the schedule and with whom you will be meeting. If not, feel free to ask for one ahead of time. Often you will meet first with the hiring manager followed by members of the team you will be working with. You may also meet with members of senior management, including directors and vice presidents. Research these people. In doing such research, I once found out that the chief scientific officer I was interviewing with attended the same university as my husband. I brought this up during the interview and we had an instant rapport.

Also, research everything publicly available about the company, including products and finances. Prepare a list of questions to ask during the interview process. Asking questions shows that you have done your research and that you are genuinely interested in the company. Lastly, be personable. Smile constantly. Every person you meet, from the vice president to the intern, will have a say in whether to hire you. Treat everyone with respect. If you are taken out for lunch or dinner, remember that you are still being interviewed. Maintain professionalism throughout the meals. Follow up each interview with a brief thank you letter or email that again highlights your skills and how you can provide value to the company. It is okay to send thank you letters to everyone you met.

The last piece of advice I can give is to plan ahead. Finding your ideal job can take six months or longer. Be patient. If you are financially able to wait, do not take the first job offered if it is not one that you are completely satisfied with. Many people will take a job just to have something until a better job comes along. But if you leave a company within a year, it may reflect badly on you because the company will have invested time and money on your training and won’t like to see its investment gone so quickly. Or you may become so busy that you no longer have the time to devote to finding your perfect job. Don’t feel that every minute of your life has to be accounted for. It is okay to leave a gap in your resume as you search for your ideal job. Above all, stay positive. The right job is out there waiting for you.

— Navi Mehra, N30 Pharmaceuticals

Interesting Uses of The Cell: An Image Library-CCDB

The Cell: An Image Library-CCDB (www.cellimagelibrary.org) continues to evolve. Some interesting new or anticipated uses for images in The Cell include:


- Scientific American included an image of a mouse neuron from The Cell (CIL:214) in an online publication: www.scientificamerican.com/article.cfm?id=mouse-neuron.

- A software company that produces project management software for laboratories is adding functionality to allow researchers to download images directly from The Cell into the software for further analysis and to use a single button to upload images.

- Distilbio (www.distilbio.com)—a life sciences search engine—now includes images from The Cell in search results.

- Articles in PubMed that have images in The Cell now have direct links to the images. For example, visit www.ncbi.nlm.nih.gov/pubmed/20679481 and expand the Linkouts section at the bottom.

Please help us spread the word and share with your colleagues what a great resource The Cell: An Image Library-CCDB is.

Have you used The Cell in interesting ways? Please let us know by sending an email to David Orloff at dorloff@ascb.org. All documented usage helps support our efforts to obtain continued funding.

—David Orloff, Senior Manager, Image Library