

STAFFING THE LAB: PERSPECTIVES FROM BOTH SIDES OF THE BENCH



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INTRODUCTION **2** // STAFFING THE LAB **4** // **PART I: HIRING POSTDOCS
AND TECHNICIANS** WHO DO YOU NEED AND WHO CAN YOU AFFORD? **8** //
THE MANY TYPES OF TECHNICIANS **12** // RECRUITING TACTICS **18** //
THE SCREEN TEST **22** // IN THE HOT SEAT: HOW TO CONDUCT
AN INTERVIEW **26** // MAKING THE OFFER **34** // MENTORING POSTDOCS START
TO FINISH **36** // WHEN PERSONNEL TROUBLES ARISE **44** // **PART II: CHOOSING
THE BEST POSTDOCTORAL POSITION** **48** // THE GREAT LAB SEARCH **50** //
APPLYING YOURSELF **54** // THE BIG DECISION AND MOVING ONWARD **58** //

INTRODUCTION: FIRST THINGS FIRST

Picking the right people to work with is critical. Whether you're a brand new faculty member looking to staff your lab or a newly minted Ph.D. looking to hire your next adviser, the decisions you make about whom to work with will enhance your career—or haunt it—for years to come.

Picking the right people requires a bit of calculus. Staffing the lab, after all, is all about integration and differentiation, finding the people who will fit together, and dividing the practical and intellectual tasks among them. Picking the right adviser, too, requires keeping your eye on the solution and considering how to solve many equations simultaneously: where to work, what problems to take on, whom to work with, how to work, and how to keep your personal life intact while raising your science to the levels you know you can attain.

The Burroughs Wellcome Fund has put together this Career Development Guide to bring together advice from experienced researchers to help you begin building your first research team. Then we flipped the problem over and looked at it from the other side. Who is the best person to work for next? How do you know? What should you look for?

We hope that reading it from both sides will help you build the best and strongest laboratory you can, whether you've already landed a job as a principal investigator or are still in training.



Enriqueta Bond, Ph.D.
President



Victoria McGovern, Ph.D.
Senior Program Officer

STAFFING THE LAB

**You have just started as a new investigator.
It's just you, some boxes, and lots of
empty lab benches.**



And that's when it hits you—a laboratory is defined by the people who work in it. Most notably, a lab's success depends on the trainees who travel through, make their mark, and move on to their next career stage, as well as on the lab technicians and managers who maintain continuity and ensure that day-to-day logistics of lab life run smoothly.

As a new lab head, your most important task will be to choose the founding members of your group wisely. Hiring your new group carries significant weight for two main reasons. First, employee salaries and benefits by far make up the largest chunk of your budget. And second, the people you choose will not only be placing their careers in your hands, but your career will also be in theirs.

In Part I of this staffing guide, we have focused on postdoctoral fellows and technicians, who not only take the most money, but also may eventually be lab leaders. They sometimes have a dual role of being both trainees and full-time employees of the institution. Recruiting stellar talent at the earliest stages of setting up a lab can be quite a challenge when a lab has not proven its reputation or track record.



We polled senior and junior faculty members on their philosophies and strategies for hiring the highest quality researchers. They share their tips for recruiting, screening, and interviewing applicants, as well as for managing and motivating personnel once they have been brought on board. In addition, they share their experiences in dealing with the unpleasant sides of being the boss—how to handle conflicts between workers when they arise, or the rare, but sometimes unavoidable need to terminate an employee.

In Part II, we switch sides and give pointers from the opposite perspective—how can a young scientist best choose a postdoctoral position to further his or her career. We'll provide some insights on how to decide what area of science to move to next, how to find labs to apply to, and what key information to glean from the interviewing process. And last, but definitely not least, how you can balance that tricky relationship with your postdoctoral adviser, who will influence your career for many years to come.

Graduate students have a special place in the lab hierarchy as pure trainees. Because many institutions have varying policies on how graduate students are chosen and supported by laboratories, we will leave them out of most of the discussion here.

A laboratory
is defined by
the **people** who work in it.



PART I:
HIRING POSTDOCS
AND TECHNICIANS

*Who do you need
and who can you afford?*



Investigators suggest thinking about staffing needs even before leaving your postdoctoral position—look around at the research you are doing and try to calculate what type of people or expertise you would need to keep it up. Is there an animal breeder who is indispensable to your work? Is there someone with microscopy or other specialized instrumentation skills without whom your publication figures would not exist?

Others take a more linear approach that says hiring a research technician should be the top priority [see next section] to get your lab up and running. Then, with a technician in place, the next priority is to cultivate a mixture of graduate students and postdocs. How many you bring in will depend on your start-up resources, funding levels, and your own energy level—dealing with employees can be hard work. Recruiting excellent postdocs at this early stage can be difficult, but there are many ways around this challenge. Some investigators advise taking any qualified postdoc who comes your way early on, because a set of experienced hands will help you get your research program under way. But others suggest avoiding this approach at all costs, and instead advise tapping only those postdocs who fit a specific need for your fledgling group.



As with much of the advice outlined here, there is no one right method or strategy for staffing your lab. Different approaches suit different personalities and research needs. But the hindsight of those who have already succeeded in staffing a laboratory can be valuable for avoiding common snags or pitfalls.

“Ask yourself, who are the people besides me who will contribute to this project? The second consideration is, who can you afford? This is usually dictated by your start-up and grant money you might bring with you,” according to Margaret Hostetter, who studies microbial pathogenesis at the Yale University School of Medicine in New Haven, Connecticut. “And finally, how much time do you have to taxi down the runway? How much time can you devote to training? Do you have two years or five years to get productive?”

“You have to ask yourself: Who are the people besides me who will contribute to this project? Who can I afford? How much time can I devote to training?”

Dr. Margaret Hostetter
Yale University School of Medicine



THE MANY TYPES OF TECHNICIANS

While everyone agrees that hiring a technician should be toward the top of your list of things to do soon after arriving at your new institution, there is wide disagreement about how much experience that first technician should have.



There are three basic philosophies:

- 1. Hire someone young, with relatively little experience, who you can train.** Advocates of this approach say this is most cost-effective, since the tech's starting salary will be lower and you will most likely be spending time at the bench anyway at this stage. You will have time to train a technician to do experiments and order supplies the way you yourself would. Also, lab technicians who are recent college graduates tend to be enthusiastic and not set in their ways. Many are highly motivated. Techs who openly plan to continue to graduate school or medical school are looking to get solid research experience and a good recommendation out of their time in your lab. The downside to this, of course, is dealing with turnover every two to three years.
- 2. Hire an experienced technician who can work independently.** Investigators who follow this approach say it is the quickest way to get your research going. They also enjoy having another person with technical knowledge in the lab besides themselves, so that trainees have another source to help with trouble-shooting. This frees up the investigator's time for writing papers and grants and provides the lab with a sense of maturity.

“I strongly advocate hiring an experienced technician,” said Tom Perkins, a biophysicist at the Joint Institute for Laboratory Astrophysics, a joint project between the National Institute of Standards and Technology and the University of Colorado-Boulder. “When you start up a lab, it’s like running toward a wall and you want to move along intellectually as quickly as you can. It is well worth the money if you find the right person.”

The disadvantages of hiring a senior technician are the higher salary requirements and the potential that he or she will be less flexible and not adjust well to your style of lab management.

3. Hire someone with an intermediate level of experience.

Investigators taking this approach split the difference by hiring someone with about five to seven years of experience. This type of technician might bring valuable knowledge of the university system or technical skills, but also be more excited about learning new ways of doing things than a tech who has “seen it all.” And if you are lucky, this person might evolve with time into a senior lab manager, which is a great way to have continuity in your lab group.

Although much of the advice that follows about hiring postdocs also applies to hiring research technicians, there are some special considerations for these positions. For example, since these can be open-ended positions, decide and make clear what you expect from the technician.

Also, many investigators recommend giving a technician a “solutions and dilutions” type of quiz during the interview stage. Test the applicant on the basic introductory skills you expect him or her to bring into the job, even if you’re hiring on the strength of that person’s familiarity with some technique. The questions should be pulled from the tasks the average worker in the lab will be responsible for on a daily basis: If you are looking for a 50 kilodalton protein, what percentage SDS-PAGE gel would you run? How do you make up a 10 millimolar solution of magnesium chloride? If a reading of 0.6 optical density is equivalent to 800,000 cells in 1 milliliter, what volume do you need to have 1 million cells?

Hiring experienced technicians also requires the tricky art of discerning why the technician is moving on from her previous lab. Has that lab’s funding situation changed? Or is that laboratory trying to unload a “bad apple”? One strategy is to call all of the references on an application before offering an interview. Ask detailed questions about how this person interacted with the principle investigator and others in the lab, what her level of independence was, how her managerial skills stacked up, and what specific roles she played on publications. These may seem like difficult questions to ask, but just be straightforward and professional. And then play close attention to the emotional overtones of the responses.

Some senior investigators say it is important to weed out applicants who view their technician job as simply that, a 9-to-5 job (though excellent technicians may often be settled people who prefer keeping regular hours). You will benefit greatly from having technicians who are your eyes and ears when running experiments—people who have an ability to think about the



science and let you know when they come across a surprising or unusual result. The type of technician who is used to performing the same technical skill over and over in an assembly-line fashion in industry may not make the transition to academic research very easily.

“I like techs who are independent and can do a variety of things,” said George Langford, a cell biologist and dean of natural sciences and mathematics at the University of Massachusetts-Amherst. In other words, technicians who are willing to pick up the ball and help out in any capacity that is needed—running gels, ordering supplies, balancing a budget, or proofreading a grant proposal—are the most valuable. “I find it really poor when a technician says, ‘That’s not in my job description.’ It is especially important for young labs to find someone to cover a range of things,” Dr. Langford said.

Finally, when looking for someone to fill a laboratory manager spot, be sure to take your time. A laboratory manager is someone you must trust to run the lab’s daily schedule and train graduate students, undergraduate students, and rotation students as they join the lab—and all without much oversight from you. So resist the urge to set a time frame for yourself. It will be worth the wait for the right person to come along.

“I like techs who are independent and can do a variety of things. I find it really poor when a technician says, ‘That’s not in my job description.’”

Dr. George Langford
University of Massachusetts-Amherst

When screening technician applicants, there are some red flags that signal trouble:

- The applicant does not understand all of the techniques that went into a publication he authored.
- The applicant is looking for “industry hours” and no weekend work, ever.
- The applicant has held several positions for three years or less, which could be a sign that he has not worked well in different lab settings.

But keep in mind, a good tech may keep very regular hours and can set a great example for the lab by getting more done in 40 hours than some people do in twice the time. You don’t want to hire someone who during an interview expresses general inflexibility about hours. However, someone who says “I need to drop my kids at school at 7:30, so I can’t be here before 8 a.m.” can be an excellent member of the lab.

RECRUITING TACTICS

Although it is sometimes true that younger labs struggle to attract the post-doctoral talent that gravitates to larger or more established labs, there are many ways to overcome this disadvantage with creative recruiting efforts.

“Get a great website up early and quickly; that’s your front door now. It may seem like a minor thing when setting up a lab, but this is how people find you in today’s world.”

Dr. Thomas Perkins
National Institute of Standards and Technology
University of Colorado-Boulder

- **Set up a good lab website right away, and place a job advertisement on your homepage.** The ad can list the positions or specific skills you are seeking as well as the fellowships that a postdoc in your group should apply for. “A website is how people find you today,” Dr. Perkins said. “You will be at a disadvantage without a good web presence.”
- **Be flexible, and be willing to look at candidates with broader training and to sift through lots of applications.** Unsolicited applications can range from a handful per month to 50 or more, but only one or two will be worth following up.
- **Actively recruit a promising graduate student from a colleague’s laboratory or whom you meet at a conference.** In fact, some professional society meetings offer mechanisms for advertising positions and interviewing candidates. This can also be a good time to arrange a face-to-face meeting with international candidates.

- **Take advantage of a local hire.** Many postdoc candidates will need to stay in a geographic area as a spouse finishes graduate work or for other reasons, and these applicants may often be of a higher quality than you could have recruited otherwise. However, candidates who do not switch institutions are sometimes at a disadvantage for winning fellowships and may cost you more.
- **Tell your network of colleagues that you are in the market for a postdoc or technician.** Make sure that your departmental colleagues as well as senior collaborators in your field know that you are looking for candidates. They can not only suggest students graduating from their groups, but they may be willing to send qualified applicants your way when their laboratories are full. Also, put the word out at neighboring departments and institutions if you are in a research hub.
- **Make evaluating international hires easy on yourself.** Ask an international candidate to combine a meeting trip with the interview. Or establish a relationship with a group abroad that can help you vet candidates from institutions in that country.

“People think as a new investigator they will be scraping the bottom of the barrel for postdocs, but that’s not necessarily true.”

Dr. Erica Ollmann Saphire
Scripps Research Institute

- **Within a medical school setting, make yourself visible to clinical fellows with M.D.s who are looking for research posts.** These fellows, who have completed their residencies and are now in a specialty training fellowship, may have up to two years of protected research time. Make sure, however, to assess their technical research skills carefully—some may be equivalent to a Ph.D. postdoc, while others may have had little or no bench research experience.

Don’t give up on finding good postdocs just because your group is new. “People think as a new investigator they will be scraping the bottom of the barrel for postdocs, but that’s not necessarily true,” said Erica Ollmann Saphire, a structural biologist at Scripps Research Institute in La Jolla, California. “Sure, some postdocs really want to work for Dr. Famous, but a lot are looking for someone young and hungry.”

THE SCREEN TEST

There are some key steps you should take before offering an interview to anyone.

First and foremost, learn the rules for interviewing and hiring personnel at your institution. Review the human resources department’s website or talk to the HR liaison in your department. There are not only obvious legal reasons for doing this, but also practical reasons—knowing your institution’s policies will clue you in to what responsibilities you must handle and what responsibilities you can let HR handle.

Next, carefully screen and evaluate each written application and résumé or curriculum vitae (CV)—a detailed résumé about the person’s academic life. In cases where the application is unsolicited, some investigators use the “three publication rule”—does the applicant have three or more publications in solid journals? At this stage, you are looking for clues that the person can carry out complicated research, has technical skills that would add to your group, and can get results published.

The applicant’s initial letter or email to you should tell you who this person is, why he is interested in your group, what kind of skills he can contribute, what type of training he hopes to gain in your lab, and what his career goals are. It should be a well-written letter that reflects independent thinking. Red flags at this point include form letters, sloppy or poorly written letters, a CV without any publications, or gaps in work history that are not explained on the CV. Remember, you’ll often be looking at people who are just about to defend a dissertation. Papers may be submitted or in press. Ask for copies of the manuscripts.



One investigator said that she likes to send back a “test” email to promising candidates. She will give the applicant an example of a current project in the lab and explain what is known so far, and then ask the applicant to describe what he would do next and how. This limits further interactions to only those candidates who are truly serious about her laboratory.

Next, if candidates look good on paper, ask them to submit letters of recommendation. Contact those references if you have a question about the letter or the applicant’s track record. Most investigators recommend calling references by telephone, because people tend to open up over the phone and say things they might not put in writing. You should ask about the applicant’s independence level, her ability to get along with others in the lab, and whether she was willing to listen to the adviser’s advice. How did she take constructive criticism? Were there any personality conflicts? How are her writing and presentation skills?

“Ask yourself, is this person really interested in being an investigator and do they bring that energy to propel them to the next stage? Or is it just a way to fill 9-to-5?”

Dr. Louis Muglia
Washington University School of Medicine

It's important to undertake all of these screening activities before talking to an applicant at length. Human nature makes us want to like someone, said Timothy Galitski, a geneticist at the Institute for Systems Biology in Seattle, Washington, but it's important to try to make an evaluation based on the person's actual achievements first. That way, when you do meet face to face, you won't be tempted to make excuses for a person's weaknesses, Dr. Galitski said.

IN THE HOT SEAT: HOW TO CONDUCT AN INTERVIEW

**Interviewing postdoctoral candidates
will give you the best information
about how this person might fit into
your research group.**



The cost of bringing candidates in for an interview is minimal compared to the investment you are about to make, in the range of \$200,000 to \$250,000 for three years of a postdoc's salary and benefits. Typically, an interview day would include a one-on-one interview with you, the candidate giving a job talk based on his research, and then informal or formal time for the candidate to interact with other lab members. Again, there is no one, correct way to conduct the interview day for a postdoc candidate, but experienced investigators share some of their favorite strategies:

- **Consider doing a phone interview first to gauge the person's level of interest in your group and whether she thinks well on her feet.** Also, a phone interview can be helpful for evaluating a foreign applicant whose circumstances make an in-person interview difficult. Have the applicant send you her job talk slides by email and then give a mini-presentation over the phone.
- **Schedule interviews for lab meeting days.** Especially in a smaller group setting, where each lab member might present progress, this gives the applicant a chance to hear about all of the lab's projects and witness how the group communicates and problem-solves together.

- **Structure the interview so that you get a couple of chances for one-on-one interaction with the candidate.** Maybe take him to breakfast to get to know him as a person in a casual setting. Then after he has given his job seminar, follow up with a 30-60 minute conversation in your office to talk about scientific details.
- **Make time to give the applicant a tour of the lab or department and highlight the resources that will be available to her.**
- **When first starting out, ask a senior colleague in your department to meet with applicants as well.** Thirty minutes of your colleague's time may provide feedback that can be enormously helpful, and the meeting also exposes the candidate to other people with whom she might interact.

For the one-on-one interview, your goal should be to both convey your own scientific and career goals for the lab and gather insight into the candidate's motivations and goals. And don't forget to describe the current work in your group—the applicant will most likely be familiar only with your published results. Although many investigators say they prefer to have a leisurely conversation rather than a grilling question-and-answer session, there are some key questions that will help you figure out what makes an applicant tick or if an applicant does not live up to his reputation on paper. You want to see that the applicant is curious and engaged by your conversation and whether he is enthusiastic about and eager to comprehend your research.

Sample approaches and questions for getting the conversation going:

Probe the applicant's working relationship with others. What was the nature of interactions with your previous adviser? How did you choose committee members? Were they helpful? How did your collaboration with this person get set up? It seems that your co-authors on this publication were responsible for this beautiful animal work, so how did that team come together?

Describe an experimental problem the lab is struggling with and ask what might be done to get unstuck. Who might you consult? This type of sensitive experiment often leads to frustrations—how do you deal with failures in your lab work? In other words, find out if the applicant can problem-solve.

Ask the applicant to “sell” her candidacy. What will you bring to my group, technically or intellectually. The responses may also help reveal whether the candidate sees herself as part of your team.

Try to tease out the candidate's motivations and thought processes. How did you decide to go to graduate school? Why did you choose this particular graduate lab? Why have you decided to switch to my field? What is it about my work that attracts you? What are your plans following your postdoc?

Ask about how the applicant might respond in a supervisory capacity. Have you supervised others before? What did you learn from that experience? What would you do if you suspected that someone you supervise is fudging his data? Have you ever encountered suspected scientific misconduct? How would you handle the situation?

In general, you want to determine whether the applicant can see a research project from beginning to end. Does she have experience designing experiments? Did she do the data analysis or not in his publications? How much writing did she do on the publications? Has she had any experience with grant writing or thinking about science in terms of specific aims of a research plan? Someone with more experience tackling all aspects of a project will be more likely to be a productive member of your team right away.

Interview red flags include:

- An applicant who gives a vague answer as to why he chose your group.
- An applicant who seems to be treating his postdoc as a “way station” rather than a end to a particular career goal.
- An applicant who has a communication or thinking style incompatible with your own.

“I’m looking for the ability to tell a story in a postdoc’s talk... You want to see a problem-solving, independent mind at work.”

Dr. Margaret Hostetter
Yale University School of Medicine

- An applicant who bad-mouths or blames his former adviser for all his troubles.
- An applicant who leaves you with a uneasy feeling in your gut—if someone fails to impress you, it is important to go with your instincts.

When a candidate gives her job talk seminar, there are certain points you want to take away from it. Martin Matzuk, a reproductive biologist at the Baylor College of Medicine in Houston, said he gives candidates 40 minutes for talks. This forces the applicant to give a focused presentation and leaves plenty of time for questions, Dr. Matzuk said. The talk should demonstrate whether the candidate can place his research into a larger context, has an understanding of the field, and has achieved technical virtuosity. Among the questions to be considered are: Does the talk show you how this person thinks? Does it show you the person’s creativity in the type of research and experiments he chose?

“I’m looking for the ability to tell a story in a postdoc’s talk,” said Dr. Hostetter of the Yale University School of Medicine. “Here’s where I was at the beginning, the question I was asking, here are the problems I had to overcome, here’s how I made that decision. You want to see a problem-solving, independent mind at work.”



If a talk is too vague or thin on ideas, this may be a warning sign that the candidate does not have the required technical abilities. If slides or data are not prepared well, this may indicate a general sloppiness or carelessness not welcome in your group. And finally, an applicant who gets defensive or has difficulty answering questions should also set off your warning bells.

You should also gather feedback on an applicant from the other members of your group. “Building a lab is building a team,” Dr. Perkins said. “You want everyone to get along and work well together.” Providing time for a candidate to talk to other lab members privately meets several needs. For starters, it shows that you trust your lab members to speak honestly, and that you don’t have anything to hide. It gives the candidate a chance to see how the lab functions and what type of mentoring he can expect.

These conversations can also help reveal the candidate’s attitudes toward working with graduate students and lab technicians. If two or more lab members report that a person seemed unenthusiastic or seemed not a good fit for the group, heed those warnings.

“Building a lab is building a team.
You want everyone getting along and
working well together.”

Dr. Thomas Perkins
National Institute of Standards and Technology
University of Colorado-Boulder

Finally, it will be critical during the interview day to discuss with potential postdocs how they expect to transition from your lab to an independent position. Most new labs will not have much in the way of projects that can “walk out the door,” but rather will still be focused on getting a core research program going. It is important to explain this up front and to offer insights as to how a postdoc might take a side project in a different direction or develop projects that are slightly tangential to the main focus of the work they may be doing on projects that will remain yours. Postdocs who will not need a project to take away might be the most compatible with young research groups.

But as a bottom line, remember that there will never be a person who is the “perfect” match for your lab. Don’t be so critical as to screen out people who could bring good qualities to your group. Each individual brings a set of both strengths and weaknesses.

MAKING THE OFFER

Before you make an offer to a candidate, be sure you **review the Human Resources guidelines at your institution for how to do it properly and legally.**

Dr. Matzuk of the Baylor College of Medicine said he likes to decide quickly if someone gave a great interview and make an informal offer before the person leaves town. “This way they know I’m really interested, and it makes a good impression when you can decide very quickly,” he said. Still, the consensus is not to feel pressured to do this, especially in your first few hires. You may need to sleep on it, or meet more potential hires, before you can make a good decision.

Many institutions also have postdoc salary guidelines or use the National Institutes of Health stipend levels (grants.nih.gov/training/nrsa.htm) as the standard for postdoc salaries, which limits the amount of salary negotiation you might have to undertake. However, some investigators said they will give an incentive to postdocs who bring in their own funding or fellowship, by offering to pay them slightly more.

In any case, once the offer has been made informally, it should be followed by a formal offer letter. Again, some HR departments will have a standard letter to use. The letter should include the start date, salary, outline of benefits, and the length of the position. Typically, offer letters give the position length as one year, with an annual review and continuation contingent on satisfactory progress. The letter may also include information about the expectation of applying for funding, research projects available, publication timelines, and even a breakdown of expected percentage of time split among various projects or goals.

MENTORING POSTDOCS START TO FINISH

**Now that you have hired a postdoc
for your group, what exactly
is your responsibility?**



The relationship is a delicate balancing act—

but, you knew that, having just come through it yourself. Your first postdoc may not be that different in age from you and may be as technically skilled or even more so than you. At the same time, she will be looking to you for help in continuing her scientific development, and as a role model for her career development.

The best approach is for both of you to maintain open lines of communication about your expectations for the project and the postdoc's goals for career development. To start off on the right foot, most investigators recommend having an early conversation that formally or informally outlines these issues. One investigator said he asks his beginning postdocs to write out the major experiments they think will be needed for their first research paper, and he then sits down with each postdoc to discuss matters.

Other investigators suggest having postdocs draft formal Individual Development Plans (IDPs) that include a year-by-year plan for both scientific achievements and progress toward a specific career goal. These plans can be reviewed every six months or year and revised as needed. The plans provide a concrete way to start this conversation and carry it forward throughout a postdoc's time in your lab. IDPs can also be incorporated into any formal annual review system that your institution may already require. An IDP provides a framework to measure progress and ask what happened if a particular goal was not met on time.

Have in mind a training arc and a time frame for its completion. You do not have to guarantee every postdoc the same number of years in the lab, but it can be useful to say, for example, that you think approximately three years is a good time frame, and then define the milestones you'd expect a postdoc to see during this period.

Whether you use a formal IDP or not, the start of a postdoc is also the best time to discuss whether the postdoc will be able to take pieces of projects away from the lab to an independent position. Be careful here. Promising new lines of research often arise during the first years in the lab, and misunderstandings over ownership of these projects may arise. As a young investigator yourself, you may want to specify in writing which projects or aspects of projects can be shared and which must remain in your group. It might be fair to discuss side projects that the postdoc wants to pursue as her own line of research, and then decide on how much time she will spend working on those relative to your projects. If a postdoc thinks she might like to pursue a teaching position and needs to gain teaching experience, you should decide together up front how much of her time in your group she can devote to that. (See <http://opa.faseb.org/pdf/idp.pdf> for an overview of the IDP process.)

It might seem a burden to put so much time and energy into your postdoc's career goals when all you really want to do is get your own scientific program going—and fast. But Christina Hull, a microbiologist at the University of Wisconsin-Madison, said she sees the two as intertwined.

“Rather than give them pithy wisdom, it is better to throw them into the position of managing a budget and other people. As people mature, letting them do those kinds of things to prepare them is a good thing for their mental state.”

Dr. Timothy Galitski
Institute for Systems Biology

“I find it very hard to supervise someone without knowing what their development plan is,” Dr. Hull said. “The choices you make scientifically, how you guide the next series of experiments, has to move people in the right direction for them. I have the fundamental belief that happy people with goals are most productive.” Not knowing a postdoc’s intended direction, she noted, makes it difficult to get the most efficient use of the postdoc’s time for both parties.

Although these conversations may seem awkward at the very beginning of a postdoctoral fellowship, it is critical for both parties to start out on the same page and to know each other’s expectations. It is also crucial to keep that conversation going through regular checking-in sessions. This might be done through weekly or monthly lab meetings or through one-on-one meeting times. One investigator said he finds that it works well to set aside one hour per week for each member of his small group. The lab workers know that time is reserved for them to discuss whatever might be on their minds. One week the conversation might be about technical troubleshooting and the next about how to prepare a good slide presentation.

Having just come through the academic job search process yourself, you probably have lots of good advice to offer postdocs who want to follow in your academic footsteps. Of course, it is easy to overdo it and come across as giving a lecture rather than helpful career advice. Here are some tips on career development from investigators who try to lead by example:

Helping with grant applications. One of your responsibilities as a mentor is to teach your postdocs about the grant application process. Grant writing is a special form of scientific writing that not many postdocs have been exposed to—it requires isolating the central scientific questions you are going to address and emphasizing your scientific motivations rather than techniques. Let your postdoc see your grant applications, especially any you may have on file from your own postdoc days. Offer to read drafts of your postdocs' fellowship applications. Point out when the writing is getting lost in the details and help your postdocs come up with simple, clear paragraph structure. Help them move into thinking about their science in terms of specific aims.

“Sure it’s a huge investment of your time,” Dr. Perkins said. “But if your postdoc gets a fellowship that covers salary for two years, that’s a third of a grant. That’s not only good mentoring, but it’s beneficial for your whole lab.”

Taking a look at local job searches. Encourage your postdocs to pay attention to the job searches that are going on in their midst. Have them attend the job talks of faculty candidates who come through your department or neighboring departments. Afterward, take some time to have a conversation critiquing the talk: What did you think was good about the talk? What did the person do wrong? Could you give a comparable presentation? Would you be competitive with these candidates? If not, what can you do to change that between now and when your time comes to go on the market?

“Sure it’s a huge investment of your time. But if your postdoc gets a fellowship that covers salary for two years, that’s a third of a grant. That’s not only good mentoring, but it’s beneficial for your whole lab.”

Dr. Thomas Perkins
National Institute of Standards and Technology
University of Colorado-Boulder

This also gives postdocs an outside measure, apart from your opinion, of what they need to do to succeed in a job interview.

Assessing publishing units. Another key skill postdocs should pick up during their time in your group is deciding what makes a publishable unit of a scientific story. The faster your postdocs get this, the better for your group as well. In your pretenure years, especially, you want to make sure that your postdocs are completing publications in a timely fashion. Many postdocs have a tendency to want to get as complete a story as possible before even thinking about writing something up, and they keep coming up with more experiments to do to make a stronger case.

It’s up to you to know when to say when, and to show them that although scientific thoroughness is admirable, it also can be costly to career progress. Encourage them to begin the writing process even before the final experiments are done, and remind them that the peer review process exists to ensure any crucial experiments will not be forgotten.

Exploring other paths. Finally, keep in mind that many (or indeed most) of your postdocs will not follow the same career path that you chose. Teaching positions, industry research careers, and careers that support the legal and financial services of biotechnology are realistic outcomes for very capable scientists. Encourage your postdocs to explore these other paths. In most cases, this means encouraging them to spend some time outside the university hallways.



Take an active interest in their curiosity about other choices and let them know you are open to providing them with opportunities to gain exposure and experience.

You may think you have little to offer in these other arenas, but your silence may be interpreted as disapproval and cause resentment. Instead, offer to connect postdocs to colleagues who have more knowledge in an area or allow someone to spend time in an internship. Your own network includes undergraduate and graduate school classmates and their close contacts. Think broadly about contacts you might share that might help them learn more about various career paths. Again, keeping an open line of communication about expectations will ensure that neither of you is disappointed by a postdoc's performance.

Easing a postdoc's transition to independence. For postdocs who do want to eventually run their own research groups, it is crucial to help them make the transition from trainee to trainer. Toward the end of a postdoc's time in your group, you should be giving her more freedom to make her own decisions about publications and research directions. Whenever possible, you should also give her the opportunity to supervise an undergraduate or graduate student in the lab. And if the postdoc has been responsible for exceptional progress on a project, you might consider giving her your usual spot as senior author.

“As people mature, letting them manage a budget or other people to prepare them is a good thing for their mental state,” said Dr. Galitski of the Institute for Systems Biology. “Being a postdoc is difficult, but feeling like you’ve been let loose a little bit can help. Once they’ve acquired more freedom in the lab, then it’s time to find their way out the door.”

Likewise, you want to be sure you are providing your postdocs with their best chances of success as a new investigator. Have a postdoc get the papers most relevant to your lab’s work out of the way early in the first two years, so that toward the end of his time he is working on the research that he will take with him. This lets the postdoc begin publishing on his own soon after he establishes his new lab. And, above all, many investigators said, try not to feel too territorial or competitive about research directions. Usually, projects have so many opportunities for asking different questions that you and your postdocs just need to have good communication so that you will not be asking exactly the same questions in the same ways. Take the view (and share it with your postdocs) that the lab is a place to bring in and farm out new ideas and add new directions to research projects, Dr. Galitski said. “Then people feel free to continue what they are doing and I don’t feel the need to protect my scientific turf,” he said.

WHEN PERSONNEL TROUBLES ARISE

With your new hiring duties comes,
occasionally, the need to fire someone.



It is natural to want to avoid conflict and confrontations, but as the lab head, you are also the lab personnel manager and that means dealing with personnel problems quickly and effectively. Dragging your feet could end up hurting the morale of the entire group.

When squabbles arise among your lab members, let each person present his point of view and then summarize what you are hearing, as in, “It seems that this is what is happening...” Avoid accusation and blame. Instead, chalk things up to a clash of styles and suggest a compromise or offer a third option as “your preferred way” of doing something. When you must provide negative criticism, sandwich it between praise of the person’s strong attributes. When someone is causing trouble or resentment among lab members or doing something wrong, reduce the issue to something that can be measured and improved. For instance, telling someone that no one else in the lab likes working with him is not helpful. Instead, you might take away the emotional and interpersonal aspects by saying, “Your lab mates report that you are not replenishing the gel supply when it is your turn. I expect you to fulfill that responsibility.” This way, you both have a standard to measure against in the future. Remember, people tend to bristle at unfairness. Follow up a few weeks later and make sure that someone viewed as a slacker has picked up his load.



If these conversations do not result in a change in behavior, then you will have to think about termination. Again, know your institution's rules and procedures for terminating an employee. Some institutions have a probationary period for all employees, so if a major problem arises early, you can terminate the person with no other justification needed. Also, the one-year review point can be a natural time to talk about unsatisfactory situations. And talk to senior colleagues—most of them will have been through something similar, or worse. Although each situation is different, it's best to follow some simple rules, according to junior and senior faculty who have terminated postdocs and technicians.

First, make your expectations explicit in a warning letter that gives the person clear goals that must be met by a specific deadline. Keep documentation of all communications from this point forward. If the person fails to meet these expectations, have the next conversation or communication quickly. Head off the situation before it gets completely uncivil—anger and hostility will quickly bring down your entire group's morale. Also, it is not fair to your group to let one person's failings hold up overall lab productivity or stall a project.

“Whatever a person is doing wrong, reduce it to something measurable. You cannot simply tell them that others don’t like working with them.”

Dr. Margaret Hostetter
Yale University School of Medicine

Although it may be the hardest conversation you will have, approach it with the attitude that it is not in this person’s best interest to stay on in the lab. You might start the conversation by asking an employee, “Are you happy with your progress? Are you satisfied here?” Or you might say, “I think you have real potential, but you are not meeting that potential in this position. This isn’t a good match for you.” If appropriate, offer to help the person find another position or direction that would fit better, or offer to write a letter of recommendation.

One of the biggest mistakes you can make is to blame yourself for someone’s poor performance. One young investigator said he bent over backward trying to come up with new ways to motivate a postdoc in his laboratory. After more than a year without results—literally and figuratively—he realized that a postdoc’s motivation can really come only from within. “At the end of the day, a postdoc is an experimentalist who should be getting things done,” he said.

PART II: CHOOSING THE BEST POSTDOCTORAL POSITION

In this section, our investigators give advice on choosing a postdoctoral lab and how to conduct yourself during postdoc job interviews. If you skipped ahead to this part, go back and read Part I. It will give you an appreciation of what's running through your potential new adviser's head. Advice won't be repeated here that you can infer from that section.

Although the task of figuring out where to do a postdoc may seem daunting, take heart from the most general of advice: there is not one magical, perfect postdoc position out there. You can make many different situations work to your advantage. It is one stage of your career and it will not last forever. Keep in mind that although you can be happy in various job situations, you have only one personal or family life, and considerations that enable you to keep this foundation strong should come first.

That being said, the postdoc is the defining stage of the future direction of your career. Choose your next research stop wisely. Two basic tenets apply—you should do something new and different from your doctoral work, and you should try to change institutions. This, of course, opens the door to thousands of labs you could try. How does one prioritize the search?

Opinions vary, but keep in mind that if you think you want to continue along the academic research path, then the science you choose as a postdoc will be the science that launches your own research group, and could quite likely be the science you follow for the rest of your career. Make sure you are extremely passionate about the scientific questions and approaches you will be pursuing as a postdoc.

Do not attempt to guess at what the next “hot topic” will be or what trends the job market will be following when you come up—there is no guaranteed recipe for success. The only thing you can control at this point is your decision about what type of science you enjoy doing. What types of scientific questions do you value? Which scientific approaches to those questions do you value? Does happiness equal productivity for you? If so, then start with places—either geographically or scientifically—where you can be happy.

THE GREAT LAB SEARCH

Okay, so you've decided on a field of science that **really excites you** and maybe even on the type of approach—genetics, biochemistry, a specific model organism—that you want to take.



But that still leaves tens to hundreds of good laboratories to choose from. So how do you identify the two to five labs to target in your searches? The good news is that there are plenty of tactics you can use to narrow down the possibilities:

Consider working in labs run by people you have met along the way during your Ph.D. Maybe someone gave a seminar in your department that stuck with you. Or a group down the hall has a close collaboration with a group in your field of interest. Talk to people who express interest in your graduate work at meetings as they drop by your poster.

Follow your passion through several iterations. Once you've identified a question you want to follow for the foreseeable future, then identify labs that consistently produce high quality work in that area. Next, try to discern if that work is coming from postdoctoral fellows in that group. If so, look up past postdocs and see where they moved on to next. How successful were they? Remember, just because a lab produces great work does not mean it produces great postdocs. By the end of this process, you should have a short list of labs to consider joining.



Challenge yourself to get out of your safety zone. It may be tempting to stay close to your doctoral area of research, but a postdoc is your opportunity to broaden your expertise and switch fields. It may be demoralizing at first to be the new kid who has to learn a new literature and new methods, but the payoff can be hugely rewarding. One strategy that has worked for others is to think about a big fundamental biological question to address and then think about what would be a unique approach to answering it.

Sacrifice a bit of research time to do your homework. Allot a couple of hours each week to read the literature much more broadly in *Cell*, *Science*, and *Nature*. Go to a large meeting—one with attendee numbers in the 1,000s or 10,000s—that is relevant to your thesis work, but also encompasses other fields. For example, annual meetings of the Society of Neuroscience, the American Society for Cell Biology, the American Society for Microbiology, the American Society of Human Genetics, the Federation of American Societies for Experimental Biology, and the American Association for Cancer Research not only can give you a chance to showcase your thesis work, but are broad enough to let you mingle with investigators across disciplines. Or put your investigative skills to work finding a mentor whose former postdocs have gone on to become more famous than him.

“I’m surprised by how many people come to interview who are so totally focused on the job. I ask them, ‘What about your partner?’ or ‘Do you like this city?’ or ‘What else do you enjoy doing?’”

Dr. Kaveh Ashrafi
University of California-San Francisco

Choose a postdoc lab based on the next job you want. For example, if you want to teach at a small, undergraduate college, then choosing to do a postdoc working with embryonic stem cells is a mistake. You’ll need an experimental system that can scale to undergraduate level research and smaller resources. Or if you are thinking about a job in the biotechnology or pharmaceutical industry, then it might be wise to pick up techniques in mammalian tissue culture or bioinformatics. Choose your postdoc to position yourself as best you can.

Have a career game plan. “You have to choose what you want to do as a career because the postdoc is where you define yourself as a professional,” said Dr. Hull of the University of Wisconsin. It’s no longer acceptable at this point to not know what you want to do with your life. You might change your mind, Dr. Hull noted, but if you go into a postdoc with a plan, then it will be much easier to come out of it with a plan. So head yourself in a direction you think you’ll enjoy, she said, “Because nobody wants to hire someone without goals.”

APPLYING YOURSELF

Once you've identified a handful of interesting laboratories, **do some investigation and background checks on them.**



Ask around your department or campus to see who knows these groups or advisers. Find out what the labs' reputations are for mentoring and their track records for graduating postdocs to successful next positions in a timely way. Do some sleuthing at a conference and talk to past and present lab members. Or email or call former postdocs from the lab and ask them about their experience in the lab. When you've made your final decision to apply to a group, try to get a personal introduction to the laboratory's head from a colleague or while at a meeting.

When you send the initial email to a potential adviser, be sure to explain the intellectual trajectory that led you to her lab and be specific about why you are interested in her work. You want to avoid the perception that you are aimlessly jumping between fields. Be supercritical of the writing that goes into the initial email and when preparing your CV. You wouldn't put out a sloppy publication, so why put out a sloppy CV and application? In fact, it is a good idea to send a test email to a friend to make sure the formatting reads well in another email program. After all, it may be the most important email you send in three years.

Once you have been invited for an interview, prepare for it seriously. This is a real job interview, so treat it as such and be a professional. This is also your chance to practice for the next set of interviews—ones for faculty jobs or other permanent positions—which will be the ones that count the



most. Read the lab's publications, but also read more generally in the lab's field and read the lab's competitors' papers, too. You can wow a potential adviser by asking what he thought of his competition's latest results and how his group will respond.

In the interview, you should be able to talk concretely about ideas and projects in this lab and what you might want to tackle as a postdoc in this group. You also need to sell yourself and your skills a bit during the interview without coming across as arrogant. Phrase your attributes in terms of what you can bring to the team.

Recognize that you will be nervous and that you will be in an intimidating position, but remember that you can always show a basic curiosity in the lab's research. Don't let the jargon of a new field paralyze you during the interview. Ask for clarification, take a moment to think, and then offer an insight. On the other hand, don't talk for the sake of filling the air. Don't blurt out answers to questions this group has been pondering for months, and always be prepared to say a simple "I don't know." Resist the urge to fake an answer.

Besides making a good impression, your job during the interview is to gather as much information as possible about this adviser, his research, and how his group functions. It is important to talk to as many current lab members as possible—and don't skip the technicians or lab managers, as they can sometimes be the most valuable source of long-term perspectives of the lab. Here is a simple checklist of questions you should try to answer for yourself during the interview process:

“If you get someone who comes in and sells themselves in a non-obnoxious way on what they will contribute to your lab—what PI isn’t going to love that?”

Dr. Christina Hull
University of Wisconsin-Madison

- Did you have a good rapport with the adviser? Were you able to communicate on the same wavelength?
- How open was the lab head to your ideas and your interest in certain projects?
- Where is the group’s science going? Does it match your interests?
- What direction is the lab headed in? Is it expanding or contracting? What is the overall funding situation of the lab?
- What is the structure of the lab? Does the training environment match your personality? What sort of mentoring will you get?
- What types of opportunities will you get? Will you be writing papers, writing grants, presenting work at meetings?
- What projects are available to work on? What components will be available to take to your next career stage? (Hint: if an investigator is uncomfortable talking about this at the interview stage, that is a bad sign.)
- What did other lab members have to say about the adviser? Did more than two people have complaints? What was the undercurrent of their comments—satisfaction or sarcasm?

For advice on preparing your job talk for interviews, see the BWF career development guide *Communicating Science: Giving Talks*. But a word of caution: try out your presentation using different types of audiovisual equipment or computers before you leave town. Also, carry your slides in two digital formats—on your own laptop and on a memory stick—and also email copies ahead of time to the adviser.

THE BIG DECISION AND MOVING ONWARD

Upon returning from your interviews, check in with former postdocs from these groups and find out how their **transition to independence** worked out.



It is important to figure out the adviser’s philosophy about this transition at this stage, not later. Also, talk to your current thesis adviser about your decision—after all, she knows your scientific style better than anyone at this stage. She may also have insights into this group’s reputation and track record at producing successful scientists. Finally, reassess your own feelings about the type of lab environment and mentoring you find most supportive to your own learning style.

Typically, it is not in the institution’s policy to offer relocation compensation. However, ask the principle investigator if the lab or department would be able to provide some compensation for relocation expense. There may be discretionary funds available, but you won’t know unless you ask. And don’t be afraid of asking. You should also follow up with the lab or department administrator.

“Once you decide where you want to go, the administrator is your best friend,” said Mary Anne Timmins, administrative director of biomedical postdoctoral programs at the University of Pennsylvania. “Establish a relationship with this person and find out what paperwork you can fill out in advance to make it easier for them.”



If you accept a position and decide six months later that you have chosen poorly or you are miserable in your daily work, start looking around for another post immediately. Almost all investigators advise that if a situation is not working out, do not agonize for months—make a change as soon as possible. Even a lost year is not that long in the big picture. At the same time, stay focused. Don't stay longer chasing a phantom paper that may not ever get written.

Finally, do not leave your transition to independence solely in your adviser's hands. You must take responsibility for evaluating your own progress during your postdoc years. Every six months to a year, meet with your adviser and discuss whether you are meeting your goals at a satisfactory rate of progress.

The relationship with your postdoctoral adviser will follow you for a significant portion, perhaps all, of your career. So it is critical to make sure that you are both on the same page when it comes to expectations for your postdoc—otherwise you'll both be frustrated and the relationship will become strained. Your adviser's letter of recommendation follows you to all future job interviews, possibly to your tenure review, and to many private grant applications. In addition, your adviser's opinion of you will influence your ability to publish, get grants, and win awards.

“You are going to be forever associated with that person and your early career work will be influenced by that person. Can they teach you the intangibles of scientific management?”

Dr. Michael Wang
University of Michigan-Ann Arbor

Keeping an open line of communication with your adviser from the start of your postdoc, throughout your postdoc, and as you leave your postdoc can only serve you well. This is especially true if you are considering working on research questions that are close to your adviser’s research focus. Being secretive or territorial will eventually come back to haunt you. Remember, your adviser’s group will always be in a better starting position if you attempt head-to-head competition. You will be better off finding ways to collaborate or compete in complementary or tangential ways.

A postdoctoral fellowship can be the most exciting time of your scientific career, with possibilities stretching before you. But it can also feel like a “make or break” time of career development. It’s important to keep your postdoctoral training in perspective.

“I’m surprised by how many people come to interview so totally focused on the job,” said Kaveh Ashrafi, a geneticist at the University of California-San Francisco. “I say, ‘What about your partner? Do you like this city? What else do you enjoy doing?’ This career move feels so stressful, but the reason you do science is because you find it stimulating. But remember, it is only part of your life, not your entire life.”

Further Resources

Communicating Science: Giving Talks
(Burroughs Wellcome Fund, Research Triangle Park, 2007)

Making the Right Moves: A practical guide to scientific management for postdocs and new faculty
Burroughs Wellcome Fund and Howard Hughes Medical Institute,
Second Edition 2006. www.hhmi.org/labmanagement

At the Helm: A Laboratory Navigator
by Kathy Barker, Cold Spring Harbor Laboratory Press, New York, 2002

University of Michigan Employment and Executive Services
www.umich.edu/~hrraa/empserv/deptinfo

National Postdoctoral Association
www.nationalpostdoc.org

National Academies Committee on Science, Engineering, and Public Policy
www.nationalacademies.org/cosepup

Science Careers
sciencecareers.sciencemag.org/career_development

Naturejobs Career Magazine
www.nature.com/naturejobs/magazine

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University of Oregon

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Appendix 1 – Sample postdoc offer letter

June 8, 2006

Dr. So and So
Home Address
Home Town

Dear Dr. So and So,

I am pleased to offer you a position in my lab as a Research Associate starting (date). The following information outlines the position:

Salary: \$45,048 – year 4 NRSA guideline for fiscal year 2006

Term: 1 year, contingent on satisfactory progress/outcome

Benefits: Research Associate benefits are outlined at the following URL:
www.youruniversitybenefitspagehere.edu

PROJECT/GOALS OUTLINE

Goal #1: Early publication of “orphan” project—determinants of haploid cell identity

Concept, proposal, and progress: Although gene1 and gene2 specify the dikaryotic state, they do not appear to play a role in haploid cell identity. The mechanism by which haploid cells “know” their mating type is unknown, but may be specified by cell-type-specific pheromones and pheromone receptors. This is particularly interesting in my favorite organism because the pheromone and pheromone receptors genes reside in the

MAT locus and are clearly diverged from a common ancestor. To address the role(s) that these genes play in specifying cell identity, we propose to “swap” pheromones and receptors in an attempt to change cell behavior response to a mating partner. To accomplish this goal, we have devised the following scheme: blah blah blah

Goal #2: Infectivity/immunology of spore infections

Working with Fred Jones, carry out experiments with his pure spore populations as follows (from my Medical Education & Research Grant):

- Investigate the properties of spore infection, germination, and pathogenicity using a mouse model of infection.
 - a. analyze germination and growth properties of spores
 - b. compare the efficiency of infection and time to disease onset between cells and spores using an inhalation assay in mice
 - c. track fluorescently tagged spores through tissues during the early stages of infection and document histological findings

Investigate the properties of spore infection, germination, and pathogenicity using a murine model of infection. The isolation of pure spore populations will be invaluable in facilitating careful analyses of spore properties both in vitro and in vivo. There is very little information available on the nature of spores from human fungal pathogens, so our analysis will begin with experiments in three primary areas: basic spore properties, pathogenesis, and disease progression.

Based on these experiments, Dr So and So will develop his program to investigate the immunological aspects of cryptococcal infections.

Goal #3: Provide general support

Share microarray expertise/programming expertise/general information resource for lab members

Goal #4: Achieve heterologous gene expression and fluorescence in my favorite organism

Evaluate past attempts (in conjunction with Mary Smith and me), and devise strategy to move forward in each of the following areas:

- heterologous gene expression
- GFP/RFP fluorescence
- cell tagging

Publication Timeline:

Haploid Cell Identity	Early 2007
Fluorescence Tool Development	?
Cell and Nuclear Tracking	?
Immunology of Spore Infections	?
Etc.	

Approximate % Effort:

Goal #1 and other lab projects	~40%
Goal #2 and new project development	~30%
Goal #3 and other support	~10%
Goal #4 (side project)	~20%

Appendix 1 – Sample department postdoc offer letter

March 11, 2004

Ms. X
Home Address
City, State, Zip

Dear Ms. X:

The Department of Biomolecular Chemistry at the University of Research Triangle Park is pleased to offer you an employee-in-training appointment as Research Associate. This is a 100 percent time appointment with a full-time annual salary rate of \$32,000 beginning November 1, 2004. We anticipate that the appointment will continue at least through June 30, 2005, contingent upon your training progress, funding availability, program needs, and satisfactory performance. As long as your appointment continues, a rate review will be conducted prior to July 1 of each year.

This position includes the fringe benefits described in the enclosed Benefits Booklet. Please contact Kathy Administrator, at 555-555-5555 for more information about this. Your Research Associate salary is, in most cases, subject to income taxes (see enclosed statement). This offer is contingent upon your completion of the requirements for the Ph.D. prior to the effective date of the appointment. You will be collaborating with Dr.

Famous Researcher on research projects focused on the molecular basis of this exciting project, etc, etc.

This offer is also contingent upon verification of identity and work authorization as required by the Immigration Reform and Control Act of 1986. Please see the enclosure for the explanation of the I-9 Form, section 1, of which must be completed and returned to the department on or before your hire date. The required documents must be presented, in person, within three days of your employment begin date. If you do not have the originals of the necessary documents, you must present a receipt from a government agency for replacement document(s) within three days, and you must present the required document(s) within 90 days of your employment begin date. The law prohibits the university from continuing to employ an individual who has not provided the required documents within the relevant time period. Verification is accomplished as follows:

1. Complete Section 1 of the I-9 Form and present it to Kathy Administrator on or before November 1, 2004.
2. Present original documents that prove your identity and work authorization within three business days of November 1, 2004.

Please visit the university's Postdoctoral Scholar web page (<http://info.youruniversitypagehere.edu>) for information about professional



and career development, networking, and resources available to postdoctoral scholars.

We look forward to a mutually rewarding working relationship with you.

Sincerely,

Another Famous Scientist
Chair and Professor
Department of Biomolecular
Chemistry

That Other Guy
Dean, U. Medical School
Vice Chancellor for Medical
Affairs

Enclosures: Benefits Booklet
Form I-9 and Instructions
Research Associate Tax
Withholding Statement

BURROUGHS
WELLCOME
FUND 

21 T. W. Alexander Drive
P. O. Box 13901
Research Triangle Park, NC 27709-3901
info@bwfund.org
www.bwfund.org
