Making the Right Moves

A Practical Guide to Scientific Management for Postdocs and New Faculty

Burroughs Wellcome Fund Howard Hughes Medical Institute **Second Edition**

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A Practical Guide to Scientific Management for Postdocs and New Faculty

Second Edition

Based on the BWF-HHMI Course in Scientific Management for the Beginning Academic Investigator

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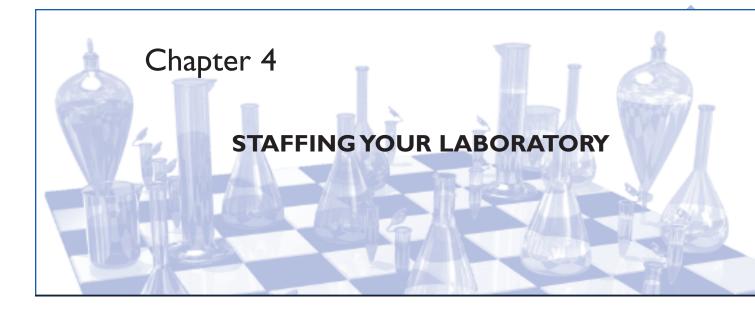
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Staffing your lab with the right people is one of the most important things you can do to ensure the success of your research. This chapter focuses on four laboratory positions—technician, postdoc, graduate student, and undergraduate—although much of the material would be relevant for anyone you bring on board. The chapter reviews issues to consider when determining your staffing needs and suggests strategies to help you manage the process for recruiting, interviewing, and evaluating applicants. The chapter also offers guidance on what to do if you have to ask someone to leave your lab.

For a discussion of the skills needed to manage the people in your lab day to day and get them to work productively, see chapter 3, "Laboratory Leadership in Science." Also consult your institution's human resources (HR) staff—they have expertise and resources to help you set performance expectations, maintain performance records, motivate staff and evaluate their performance, deal with behavior or performance problems, and manage issues related to staff promotion and job growth.

GETTING STARTED

The process for staffing your lab will vary depending on the position you are trying to fill and the extent to which your institution's HR department is involved. Because the hiring process in an academic setting can be protracted and time-consuming, you should involve your department's administrative staff or your institution's HR department from the beginning.

Know the Difference Between Employees and Students

It is important to distinguish between employees and students. Generally, technicians and postdocs are considered to be employees of your university or research institution. They receive regular wages and have taxes withheld, and federal and state laws and your institution's personnel policies apply to their employment. On the other hand, undergraduate and graduate students are just that—students. Although they may receive a stipend for work in your laboratory, their relationship to you in almost all cases is that of learner to teacher, not employee to employer. For the most part, students work in your lab to gain experience and to learn how to do science, not because they receive monetary compensation.

In addition, employees are "hired" and "fired," and students are "assigned" to a lab and "released" from it. Although this may seem like mere wordplay, the nuances of these relationships are important because of the legal implications.

Avoid Discrimination

In the United States, many laws—at the federal, state, and local levels—guide and control how you as the employer's representative work with other employees, particularly those you supervise. These laws determine many aspects of the employer/ employee relationship. One very important principle to follow is to avoid discrimination on the basis of an individual's membership in a protected group or an individual's protected characteristic. Generally, this means that you cannot discriminate in an employment-related decision (such as interviewing, recruiting, selecting, hiring, training, evaluating, promoting, disciplining, or terminating) on the basis of someone's race, color, religion, age, sex, national origin, sexual orientation, marital status, mental or physical disability, or other protected status. Work with HR and with knowledgeable people in your department to ensure that you follow the law and your institution's policies and procedures.

Determine Your Staffing Needs

Your decision to take on staff will depend on several factors, such as the provisions of your start-up package, the stability of your external funding sources, the progress of your research, and even your personal preferences about performing various laboratory tasks. Established scientists caution new principal investigators against rushing out and hiring people just to fill an empty lab. Before you bring on staff, think carefully about the consequences. Will you be able to recruit the caliber of people you need? Can you make the time to train and mentor others? Remember, you need to preserve sufficient time and space for your own work at the bench.

Often, the first person a new investigator hires is a lab technician. This versatile lab member can help you with time-consuming initial tasks, such as logging in and setting up equipment and handling routine tasks that keep your laboratory working. Although your budget may more easily accommodate a junior technician, you might

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Early in my career, when I couldn't attract top postdocs, I put my energy into graduate students and technicians. The graduate students are like raw lumps of clay that have the opportunity to mold themselves into something really great.

-Thomas Cech, HHMI

benefit more by hiring an experienced technician who can help train other staff as they come on board. Some experienced technicians can also contribute in substantive ways to your research project. A technician who is familiar with the administrative processes of your institution can also be extremely valuable.

Consider bringing a graduate student on board once your lab is running and you have the time to invest in training. Working with your technician and graduate student can provide you with additional intellectual stimulation, and when each is able to work independently, you should have more time for grant writing and doing experiments. Hire a postdoc when your main project is well under way and you have enough other projects, so that you can turn one of them over to the postdoc and allow him or her to have a great deal of responsibility.

You may want to be cautious about taking on undergraduates because of the large time investment needed to make them fully a part of the lab. If you decide to take on an undergraduate, consider limiting the initial assignment to one semester. At the end of that time, determine whether the student should continue for a second semester. (Additional considerations for working with undergraduates and other lab members can be found in chapter 5, "Mentoring and Being Mentored.")

Write the Job Description

The next step is developing a job description for the open position. First, identify and prioritize the initial and ongoing lab tasks for which you need support. Then determine the qualifications needed to best complete these tasks and develop a general plan for allocating the person's time. Most HR departments have job descriptions that you can use as models. Bear in mind that the position will have to fit within your institution's established compensation and classification system. The process may be more complicated if unions represent identified groups of employees at your institution.

RECRUITING APPLICANTS

Get the Word Out

Informal methods. Try to recruit by word of mouth. Ideally, you want people to seek you out. Meetings and seminars where you present your work are good venues to reach graduate students and postdocs, as well as lab technicians who are not employed by your institution. Another strategy is to include a statement on your Web site inviting people to contact you if they are interested in working with you. As you get to know students in your classes, you may find some who are interested in learning more about your work and carrying out a research project in your laboratory. In addition, you may be able to recruit graduate students from those who rotate through your lab as part of the curriculum.

Formal advertisements. To recruit postdocs, you may decide to place advertisements in journals such as *Science* (http://recruit.sciencemag.org), *Cell* (http://www.cell.com), and *Nature* (http://www.nature.com), both in hard copy and on the Web. Other resources for advertising are the Federation of American

Societies for Experimental Biology's Career Resources Web site (http://www.faseb.org/careers/careerresources.htm), your scientific society's Web site, *Science*'s ScienceCareers.org (http://sciencecareers.sciencemag.org), and the mailing list servers maintained by professional associations, such as the Association for Women in Science. For any advertisements you place, make sure you follow your institution's policies.

What Do You Have to Offer?

As a beginning investigator, you may find it a challenge to recruit the people you want, especially postdocs and experienced lab technicians. Here are some things you can do to increase your chances:

- Promote your vision. When you talk to the applicant, take time to identify your vision for your lab. Your excitement about your work and your lab will excite and interest potential staff.
- Communicate your lab culture. Think about how to create a lab environment that allows you and your staff to work efficiently and harmoniously. If good communication, collaboration, and cooperation are valued concepts in your lab, they can be selling points in recruitment.
- Convey your commitment to mentoring. Let potential staff know that they will be working directly with you and that you have an interest in helping them in their careers.
- Offer flexibility where you can. Flexibility, especially about assignments or research avenues, is attractive to most job applicants.
- Provide a realistic level of reassurance regarding the stability of your funding. Potential staff are likely to be aware that the money to pay their salaries may be coming from your research grants.

What They Are Looking For

Lab technicians. Technicians may be attracted to a beginning laboratory because they are eager for the opportunity to work closely with the principal investigator and are interested in learning new techniques and being included on papers. Good salaries and status (related to publishing papers) may be of prime importance to career lab techs, whereas experience, especially experience that will help them decide whether to go to graduate school or medical school, may be more important to short-term lab technicians.

Graduate students. Graduate students are often attracted to new labs because, like lab technicians, they are eager for the opportunity to work directly with principal investigators. Mentoring graduate students can be time-consuming, especially for the first few months. Therefore, you may want to sign up your first graduate student when your lab is running well and you have time to work with each student properly. Thoughtful mentoring of graduate students early in your career will help you develop a positive reputation and will increase your ability to attract other grad-

uate students. On the other hand, if your first graduate students have negative experiences in your lab, they will quickly share this with their peers, and your ability to recruit students will suffer greatly.

When I talk to students about what kind of a lab they should join, I always tell them that it's a very special experience to go into the laboratory of someone who is just beginning an independent research career, because the principal investigator is in the lab all the time working shoulder to shoulder with them. There is a lot of excitement and anticipation about exactly which direction the laboratory will go. —Thomas Cech, HHMI

Undergraduate students. Undergraduate students may want to work in your lab because they are curious about research, perhaps because they have talked with their peers who are having a good experience in a lab and want to find out whether they should consider graduate study. Or they may be looking for academic credit, funding, or recommendations for graduate or medical school. Try to select undergraduates who are motivated to contribute to the productivity of your lab.

Postdocs. It may take two to three years for you to recruit a postdoc with the desired qualifications. Most postdocs are attracted to more established labs because these usually are better launching pads for their careers. Nevertheless, some postdocs might be attracted by your research area, your concern for furthering their careers, or your institution's reputation and geographic location. If you have a good reputation from your own postdoctoral work, you may be able to recruit highly qualified postdocs right away. Having a policy that allows postdocs to take their projects, or some aspect of their projects, when they leave your lab is also a potent recruitment tool.

SCREENING APPLICANTS

M any principal investigators do all the screening for jobs for which scientific qualifications are important but may rely on HR to do the initial screening for administrative positions. However, as a beginning investigator, you probably will not be swamped with applicants, so you may want to screen all the applicants yourself.

When you review résumés, check skills against qualifications and look for transferable skills. Always review résumés carefully—some applicants may inflate their experience. Gaps in employment and job-hopping may be signs of problems.

Tips for Specific Positions

For an applicant to a postdoc position, consider publication *quality*—not just quantity—and the applicant's contribution. A first-author citation indicates that the applicant probably spearheaded the project. A middle-author citation indicates that the applicant contributed experimental expertise but may have had less to do with the project's intellectual construct. Although it may not be realistic for a beginning investigator, try to find a postdoc with a record of accomplishment—usually two first-author papers—that indicates he or she will be able to obtain independent funding.

If a technician has contributed to publications, you should evaluate them to determine whether the technician has the ability to contribute intellectually as well as technically to the lab. The résumés of less-experienced lab technicians may not show a record of contributions to published papers or other indicators of productivity. Carefully check references to find out about their capabilities.

For a graduate student, speak informally with other people who have worked with the student, including teaching assistants who may know how the student has performed in a laboratory course. Take the student to lunch and see how articulate, bright, and energized he or she is. When selecting graduate students and undergraduates, remember that a high grade-point average is no guarantee of success in your lab.

Check References Directly

For a variety of reasons, including fear of a lawsuit or hurt feelings and concerns about confidentiality, people rarely write negative letters of recommendation. Therefore, you need to contact applicants' references by telephone. You may want to talk with HR in advance about your institution's policies on conducting reference checks.

What to ask a reference. When discussing an applicant with someone who has provided a reference for him or her:

- Describe the job and the work atmosphere you want to create.
- Ask short, open-ended questions, and avoid asking questions to which the desired response is obvious.
- You might want to ask, Why is this person leaving? Is he or she reliable? Would you rehire this person? What are this person's strengths and weaknesses? What are you most disappointed in with respect to this person?
- Probe for further information, and ask for examples. Do not settle for yes or no answers.
- Try to determine whether your lab values are similar to those of the reference, perhaps by asking about the reference's lab and philosophy. This information should help you decide how much weight to give to the reference.

Types of Interview Questions

Open-ended questions cannot be answered yes or no; for example, "Tell me about yourself." The applicant determines the direction of the answer.

Directive questions solicit information about a specific point; for example, "What skills do you have for this position?" The interviewer determines the focus of the answer.

Reflective questions solicit information about a past experience that might serve to predict the applicant's future performance; for example, "Describe a time when you demonstrated initiative."

Contact all references. You are trying to make a decision about someone with whom you will be spending many of your waking hours—make sure you get the information you need. To correct for bias in the responses of any one reference, make sure you call all of an applicant's references, even those overseas. Don't rely on e-mail to make the reference check—you're unlikely to get the kind of information you're looking for.

Sometimes, applicants won't give the name of a current supervisor as a reference. If that is the case, you must respect their request for confidentiality. However, you should probably ask why the applicant doesn't want you to call. You can also ask for additional references who can provide you with information about this person's work habits, accomplishments, and history.

Further Screen Applicants by Telephone

You may want to screen promising applicants by telephone before inviting any of them for a formal interview. As with interviewing references, focus on asking openended questions. For foreign applicants, open-ended questions are particularly helpful in determining the person's ability to communicate effectively in English. The appendix (page 96) shows a sample outline that can help you in your phone interviews with applicants. (Consider developing a similar form for talking to applicants' references.)

INTERVIEWING APPLICANTS

Invite Applicants to Visit Your Lab

After you have completed the initial screening, narrow your list of potential applicants to a reasonable number of good prospects. Then, invite each person to visit your lab for a formal interview. Remember, the initial telephone screening interview is no substitute for this in-person interview. (Your institution may be willing to pay the travel costs of applicants for a postdoc position.) In addition to the interview with you, the applicant should meet informally with other members of your lab or, if this is your first hire, meet with your colleagues, perhaps over lunch or dinner. Also arrange for the applicant to spend some time with other lab members and colleagues without you. For a postdoc position, require that each applicant deliver a seminar to members of your lab or department, and then get their feedback.

Share your requirements and expectations for the successful applicant with the other people you have asked to help conduct interviews. This way everyone will be looking for the same attributes and skills.

The presentation [postdoc candidates] give to the lab is key. You can check out their ability in public speaking, which is important because in science a lot of times you are a salesperson. I usually try to ask them some decently tough questions—not to try to stump them, but just to make sure that they can think on their feet, because you have to do that a lot as a scientist.

-B. Brett Finlay, University of British Columbia

Conduct a Structured Interview

The goal of the structured interview is to use a standardized set of predetermined questions to gather key information in an efficient, equitable, and nondiscriminatory manner from all qualified applicants. You want to give each applicant a fair opportunity to compete for the position. Your questions should be

- Outlined ahead of time so that you ask basically the same questions of each applicant
- Job-related and legal (avoid asking personal questions)
- Short and open-ended, like those used when checking references
- Focused and designed to elicit information (avoid asking philosophical questions)

Tailor your follow-up questions to reflect each applicant's responses and to encourage each applicant to provide examples from his or her own experiences.

Topics to Avoid

Most illegal or ill-conceived questions deal with race, color, national origin, sex, religion, disability, or age. You should not ask about sexual orientation, marital status, marriage plans, pregnancy or plans for having children, the number and ages of dependent children, childcare arrangements, or other non-work-related matters. Remember that job-related questions are the only appropriate means by which to determine skills and qualifications. Your HR department can provide more guidance on topics to avoid during interviews.

Develop the Interview Questions

As you develop your questions, think about how to determine whether the applicant has the knowledge, technical skills, and personal qualities that you need. Review the job description you created earlier, the applicant's résumé, and your notes from your conversations with the references to identify any items or information gaps that need clarification in the interview. I ask them, "Why do you want to come to this lab? What interests you? What areas do you want to work in?" I'm looking for people who say they want to broaden their horizons, not those who want to continue doing the same thing.

-B. Brett Finlay, University of British Columbia

Sample interview questions. At the Helm: A Laboratory Navigator by Kathy Barker (see "Resources," page 95) contains a list of general questions as well as those geared for specific laboratory positions and for determining specific personal characteristics. In addition, you may want to tailor the following questions to the position for which you are interviewing.

Experience and Skills

- Tell me about your most significant accomplishments.
- Tell me the part you played in conducting a specific project or implementing a new approach or technology in your lab.
- I see you have worked with [insert specific technology or technique]. Tell me about its features and benefits.

Commitment and Initiative

- Why do you want to work in my lab?
- Where do you see yourself in five years?
- What kinds of projects do you want to do? Why?
- Tell me how you stay current in your field.
- Describe a time when you were in charge of a project and what you feel you accomplished.
- Tell me about a project or situation that required you to take initiative.

Working and Learning Styles

- What motivates you at work?
- Would you rather work on several projects at a time or on one project?
- Do you learn better from books, hands-on experience, or other people?
- Tell me about a project that required you to work as part of a team. What was the outcome of the team's efforts?
- How would you feel about leaving a project for a few hours to help someone else?

- If you encountered a problem in the lab, would you ask someone for help or would you try to deal with it yourself?
- You may be asked to work after hours or on a weekend. Would this be a problem?

Time Management

- How do you prioritize your work?
- What happens when you have two priorities competing for your time?

Decision Making and Problem Solving

- What is your biggest challenge in your current job? How are you dealing with it?
- Tell me about a time when you made a decision that resulted in unintended (or unexpected) consequences (either good or bad).
- Give me an example of a situation where you found it necessary to gather other opinions before you made a decision.

Interpersonal Skills

- How important is it to you to be liked by your colleagues and why?
- If you heard through the grapevine that someone didn't care for you, what would you do, if anything?
- Tell me about a situation in which your work was criticized. How did you rectify the situation?
- Describe a scientist whom you like and respect. What do you like about this person?

Cultural differences. You may find yourself considering applicants from different cultures whose beliefs, such as those about self-promotion, collaboration, and deference, may differ from the beliefs commonly held in the United States. To learn more about cultural factors, see chapter 5, "Mentoring and Being Mentored." To ensure you are considering all candidates fairly, refer to Kathy Barker's *At the Helm: A Laboratory Navigator*; in that book the author provides a list of useful questions you might ask a candidate, including the following:

- How do you feel about getting in front of a group and describing your personal accomplishments?
- How would you respond if a more senior lab colleague took credit for your project?
- If you did not understand something, would you persist in asking for help even if the principal investigator got annoyed?

My favorite questions are, "What do you want to be doing five years from now? Ten years from now? What area do you want to be working in?" These give me an idea of just how mature [applicants] are in terms of how much they have thought about what they want to do and how committed they are.

-Gail Cassell, Eli Lilly and Company

Tips for Conducting an Interview

- Before you begin, try to make the applicant feel comfortable. Make appropriate small talk, offer a beverage, and compliment the applicant on making it thus far in the selection process. Remember that the applicant is also deciding whether he or she wants to work for you.
- Develop professional rapport, but avoid a social atmosphere:

Explain how the interview will be structured.

Briefly describe the selection process.

Outline the responsibilities for the open position.

Convey your expectations about the job. Include values that may seem obvious to you, such as your commitment to lab safety and scientific rigor.

Keep in mind the topics to avoid.

- Take brief notes. Record actual answers to questions, not evaluative or conclusive comments.
- Listen carefully. Let the applicant do most of the talking.
- Develop a high tolerance for silence. Give the applicant a chance to think and develop thoughtful answers to your questions.
- Give the applicant many chances to ask questions. This will give you some insight into what is important to him or her.
- Never make promises or give commitments, even those that seem innocent to you.
- Ask the applicant about his or her timetable for leaving the current job, even if you asked it during the telephone interview.

Before ending the interview, do the following:

Give the applicant a chance to add anything else he or she thinks may be important for you to know in making your decision.

Make the applicant aware of the next steps, such as additional interviews and the time frame for hiring.

Thank the applicant for his or her time.

Special Considerations

This section is especially relevant for interviewing technicians, postdocs, and other professional laboratory staff.

Pregnancy. If, during the interview, a well-qualified applicant tells you she is pregnant, remember it is illegal to discriminate against someone because she is pregnant. Familiarize yourself with your institution's policies on maternity leave before making any statements to the applicant about what length of maternity leave would be permitted and whether the leave would be paid or unpaid. Similarly, your institution may have a policy on paternity leave that may apply to an applicant.

Visas. If you are filling a postdoc position and are dealing with foreign applicants, remember that visa rules and requirements are complex and change frequently. Some visa types are more desirable from the perspective of the applicant (e.g., because they allow for concurrent application for permanent residence in the United States). Other visa types are more desirable from the perspective of the employer (e.g., because they are easier to administer). Special concerns for any type of visa may include visa arrangements for a spouse and other family members, requirements to return to the home country, and employment implications. Keep in mind that obtaining a visa can be a very slow and lengthy process. (Obtaining visas to travel to the United States has become even more time-consuming given increased U.S. security concerns and clearance.)

Consult HR, your institution's international office, and your department's administrative staff about visa rules and requirements. They can also help you determine which visa is most appropriate for a given applicant. You can also check the latest information from the State Department (*http://travel.state.gov/visa/visa_1750.html*) and the U. S. Citizenship and Immigration Services (formerly the Immigration and Naturalization Service, *http://www.uscis.gov/graphics/index.htm*). The site *http://www.visalaw.com* may be helpful. A brief visa primer also is available in *At the Helm: A Laboratory Navigator* by Kathy Barker.

In addition, try to determine the consequences (for you as well as the applicant) if poor performance forces you to ask the postdoc to leave your laboratory. Because this is an extremely complex area of immigration law, it is important that you consult your institution's HR or legal department and follow their advice.

EVALUATING APPLICANTS

B efore you begin evaluating an applicant, make sure that you have all the necessary information. Conduct any reference interviews that you were unable to complete before the interview. Gather opinions from others who have met with the applicant. As needed, seek guidance from your department and HR.

Maintaining Objectivity

As in any situation that involves interpreting interpersonal behavior, objectivity in evaluation may be difficult. Nevertheless, try to avoid the following:

- Relying too heavily on first impressions.
- Making a decision too early in the interview, before asking all questions.
- Downgrading an applicant because of a negative characteristic that is not relevant to the job itself.
- Allowing a positive characteristic to overshadow your perception of all other traits, sometimes called the "halo effect."
- Judging the applicant in comparison with yourself.
- Comparing applicants with one another rather than with the selection criteria (e.g., if you have been interviewing poorly qualified applicants, you may rate average applicants highly).
- Allowing factors not directly related to the interview to influence your estimation of the applicant (e.g., interviewing during times of the day when you may be tired).

What to Look For

In addition to determining whether the applicant has the qualifications required to perform well in your lab, you should also keep the following points in mind:

- Consider the "chemistry." First and foremost, pay attention to your intuitive reaction to the person. Look for a person who is interested in, and able to get along with, others.
- Ascertain whether the applicant is a good fit. Keep in mind that you are building your team and need people with the skills and personalities to get things done. Look for people who have a track record of productivity and have demonstrated an ability to learn new skills.
- Seek someone who has a passion for science and a strong work ethic. Enthusiasm, a can-do attitude, and the willingness to go the extra mile are critical attributes.
- Check the applicant's career plans. Knowing what the applicant wants to be doing in 5 or 10 years can give you insight into his or her scientific maturity and creativity, as well as his or her commitment to a specific research area.

Be certain the applicant is committed to good research practices. Record keeping and reporting results are even more important now than in the past because of patent and other legal issues. Insist on the highest level of scientific integrity from anyone you are considering.

If people in the lab had reservations about whether they would get along with someone, I probably wouldn't bring that person in.

---Tamara Doering, Washington University School of Medicine

If people don't seem like they would be fun to work with, I would use that as a reason to turn them down. Even if they have a lot of papers and seem to be very smart, I think you might want to think twice about hiring them.

-Thomas Cech, HHMI

Red Flags

Warning signs during an interview that should alert you to potential problems include:

- Unwillingness to take responsibility for something that has gone wrong.
- Complaining about an adviser and coworkers.
- Demanding privileges not given to others.
- Delaying answering questions, challenging your questions, or avoiding answering them all together. (Humor and sarcasm can be tools to avoid answering questions.)
- Unless you have been rude, responding to an interview question with anger is never appropriate.
- Incongruence between what you hear and what you see (e.g., downcast eyes and slouching are not signs of an eager, assertive candidate).
- Trying to control the interview and otherwise behaving inappropriately.

MAKING THE OFFER

This section is especially relevant for hiring technicians, postdocs, and other professional laboratory staff.

Before you make an offer, check with your department to learn which items of the job are negotiable and whether you are responsible for negotiating them. HR or your department should provide you with institutional salary ranges for the position. In some institutions, HR will determine the initial salary that you can offer. In other institutions, you may be given some leeway within a predetermined range that is appropriate for the job description.

Once you have identified the person you wish to hire, contact him or her by telephone to extend the offer and to discuss start date, salary, and other conditions of employment. (Be sure to check with HR first to determine whether you or they will make this contact and cover these issues.)

Inform All the Applicants

First, inform the person you have selected. If he or she turns down the offer, you can move to your second choice.

Once you have filled the position, let the other applicants know. You do not need to give a specific reason for your decision not to hire an applicant. However, you may state that the selected candidate had better qualifications or more relevant experience or that it is your policy not to disclose this information. Check with HR and your department's administrative staff about policy in this area.

The Offer Letter

After you and the selected candidate have confirmed the job details via telephone, your institution will send the formal offer letter. Usually, it confirms the offer terms, including start date and salary. Coordinate with HR and your department's administrative staff to determine what information to include.

An offer letter to a foreign national may need to include more information. For example, it may need to spell out that employment is contingent on the ability to obtain authorization for the individual to work in the United States and to keep the work authorization in effect. HR or your department's administrative staff will help you follow policies correctly in this type of situation.

ASKING STAFF TO LEAVE

D espite all your best efforts, you may need to ask someone to leave your lab. Before considering dismissal, be sure that you have tried various avenues to help this person be successful in your lab. This may include assistance with scientific techniques and counseling for behavioral issues. Also, be certain that your dissatisfaction is based on objective observations, not your personal biases. Try to determine whether you think the person would be better off in another lab or should consider another career. For students and postdocs, this usually means talking with that person and his or her faculty adviser or the graduate student committee. It may be best to suggest to someone that research is not for them if you truly believe the profession is not suited to his or her talents or personality. You can provide that person with encouragement and options. For example, *Science*'s ScienceCareers.org Web site provides a range of career options for people with bioscience backgrounds (*http://sciencecareers.sciencemag.org*).

There are no hard and fast rules about how a manager should address performance or behavior problems in the lab. However, keep in mind the following, especially if you're thinking about letting someone go:

- Be fair.
- Let there be no surprises.

Fairness dictates that lab members receive some type of notice about unsatisfactory performance. Make sure the person knows your concerns and is given a reasonable opportunity to respond and turn things around.

Keep a Record

You should outline and set expectations for the performance and conduct of everyone in your lab. The process is more formal for employees than it is for students.

For technicians, postdocs, and other professionals, job expectations should be made clear. Don't expect your employees to read your mind about what you want them to accomplish and how you want them to accomplish it. Keep good records of your conversations with everyone so that you can track your own efforts and determine whether your staff has met expectations. If a lab member is not meeting expectations, make sure you document your attempts to help the person improve his or her performance or prepare for a new career. Should you ultimately have to terminate this person, these records can help avert external challenges to your decision.

When postdocs don't fit in, I try to help them find other positions. Sometimes they realize that this isn't where they belong and they do it themselves. I say, "What do you want to work on? Let's see what we can do." People are different, sometimes things don't work out, and this is not a reason to be defensive. The focus is to help people do what they value.

—Suzanne Pfeffer, Stanford University School of Medicine

Deliver a Warning

Warnings should be delivered by you, calmly and in private. Listen to the employee's point of view and explanation. Develop a plan for addressing the problem with benchmarks and timelines. You may want to commit your action plan to writing. If you provide advance notice, employees will not be surprised when you take forceful action concerning unsatisfactory performance or behavior.

If You Decide to Terminate

An employee with serious work-related problems is a disruptive force and, especially in a small lab, can significantly retard research progress. Although it is not easy to decide to terminate someone, those investigators who have had to release staff say that in retrospect their biggest mistake was not doing it sooner.

To be fair to yourself and your staff and to avoid lawsuits, an involuntary termination should never happen out of the blue unless it is the result of substantial misconduct, such as clear fraud or violence in the workplace. Always avoid firing on the spot. You should find a way to calm the situation so that you don't take precipitous action. A suspension with or without pay may be a good option for the short term while you consider the situation. If you have decided that termination is your only solution, consult with HR as soon as possible to ensure that you are complying with institutional and legal requirements relating to termination and correctly documenting your actions.

Questions to ask yourself before letting someone go. HR professionals recommend that, if circumstances permit, you ask yourself the following questions and document each of the actions before proceeding:

- Have you given the person at least some type of notice or warning?
- Have you made it clear to the person what he or she is doing wrong?
- Has the person received counseling or assistance in learning new or difficult tasks? If so, how much?
- Are you treating (or have you treated) the person differently from other staff in your lab?
- Are you following written procedures and institutional policies?
- Does the documentation in the personnel file support the reason for discharge?

Ideally, you have conducted regular and candid performance reviews with all your laboratory staff and now can use this documentation to help support your decision. (For a discussion of conducting performance reviews, see chapter 3, "Laboratory Leadership in Science.")

How to terminate. Terminating anyone from your lab is a confidential matter and should not be discussed, before or after the fact, with others in the lab. A termination meeting should be conducted by you, the investigator, in your office, in a way that is private and respectful. (You can always ask HR for assistance if you are unsure how to proceed or if you suspect that your employee may act inappropriately.)

Prepare for the meeting. Develop a script and practice it until you can convey the information confidently. Keep in mind that what is said during the termination meeting can become part of the basis for a subsequent challenge. Remember to

- Be polite.
- Stay focused on the issue at hand. Get to the point quickly. Explain the decision briefly and clearly. Don't apologize or argue with the employee in an effort to justify your decision.
- Avoid laying blame.
- Arrange to have scientific materials and equipment and supplies returned to you, including lab notebooks; protocol books (unless it is a personal copy); lists of clones, cells, and experiments in progress; and keys.
- Let the employee have an opportunity to have his or her say, and pay close attention to what is being said.
- Refer the employee to HR or to the office responsible for discussing benefit eligibility.
- Take notes that document this meeting and convert them into an informal or formal memo to file.
- Try to part on cordial terms. Science is a small community, and your paths may cross again.

Termination letters and references. As part of final documentation, a termination letter may be required by your institution or by state law. In addition, you may be asked for, or may wish to offer, a reference. Check with HR about proper procedures.

Visa considerations. Consult with HR or your department's administrative staff about visa issues before terminating a foreign national employee. Be certain that you are not legally responsible for continuing to pay the salary of someone no longer working in your lab. Again, it's better to understand these requirements before you hire someone with a visa.

RESOURCES

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APPENDIX: TELEPHONE INTERVIEW OUTLINE

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Candidate: _____

Investigator's Questions (Use open-ended questions, and ask for examples.)

To see if we might fit, give me an idea of what you are looking for.

What are your goals for this position? (short-term expectations, long-term plans)

Tell me about yourself as a scientist:

- What are your strengths?
- What are your weaknesses?
- What do you want to learn?
- What are you looking for in a supervisor?

What is your preferred interaction style? (with me, with others, on joint projects)

Timing, current job

Visa status

Investigator's Comments

Background, interests, goals

The projects we are working on

What I am looking for

What I expect (enthusiastic, interested, communicative, a hard worker, responsible)

What I will offer (be there, help, communicate, support career with communication about goals, funding for x amount of time)

The university, department, town

Timing, constraints

Source: This interview form is adapted from one developed by Tamara L. Doering, Washington University School of Medicine.