

Advice for Beginning Faculty: How to Find the Best Postdoc

You made it. You are finally the head of your own laboratory. You have money, space, equipment—all you need now are a few talented postdocs to help you carry out your research agenda. But how do you go about finding the right people for your lab? **By Laura Bonetta**

When you are starting out you should begin small and stay focused. But almost everyone breaks this rule,” says **Graham Warren**, scientific director of the Max F. Perutz Laboratories at the University of Vienna in Austria. “When everyone is telling you that you need to publish and grow, you feel a lot of pressure to fill the lab.”

It is tempting for beginning faculty to rush into recruiting several postdocs right away, but hiring the wrong person can be detrimental to your progress. “Months can go by and you don’t get any good applications. It is really hard not to rush into things,” says **Brent Stockwell**, associate professor at Columbia University in New York City. “But from everything I have seen, it is never a good idea to take someone in just to fill a spot, especially at the beginning when you are setting the tone for your lab. Keep the quality high and do not compromise standards, and it will all work out.”

The key to avoiding mistakes, experts say, is properly vetting all applicants, from carefully evaluating the initial e-mail contact, to thoroughly checking references, to meeting and interviewing the applicant in person.

The Initial E-mail Contact

It is not unusual for established researchers to receive several unsolicited e-mails per week asking for a spot in their labs. A beginning investigator, on the other hand, will get few if any. He or she will probably have to get the word out about available positions by advertising in science journals, listservs, the lab website, or through personal contacts. When **Kornelia Polyak**, associate professor of medicine at Harvard Medical School in Boston, first set up her own lab about 10 years ago, she asked former mentors and senior faculty at Harvard to direct promising applicants to her, if they had no space for them in their own labs. “That does not always work because frequently people who apply to a large lab do not want to go to a small one, but sometimes they did,” she says.

Polyak acknowledges that it can be difficult to get really great postdocs at the start of your career, but it pays to be patient. “It is better not to hire too many people at the start, but rather to focus on getting publications out, even if you have to do the benchwork yourself,” she says. “As soon as you get more established, people will start applying.”

Once applications start coming in, learning how to sort through them is a valuable skill. A good number of e-mails likely can be discarded as “spam” if they are not addressed personally to the lab head, or if they are written carelessly and sloppily. Most investigators then want to see some evidence that the applicant has thought carefully about why he or she wants to be in that particular lab. “You have to read between the lines to see if the person is searching for any old lab and does not really know what your research focus is,” says **Joseph Gall**, staff member of the Carnegie Institution’s Department of Embryology in Baltimore. “I don’t pay much attention to those applications.”

The next step is to look at the attached curriculum vitae. “I generally **continued** »



“It is really hard not to rush into things.”



Middle: **Brent Stockwell**; Bottom: **Carol Greider**

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“One question I always like to ask is ‘If you had the opportunity to extend this person’s stay in your lab, would you do it?’”
—Margaret Hostetter



want to hire people who have been able to publish because it shows that they can take a project from the beginning all the way to the end. It takes a certain set of skills to do that,” says Stockwell. “But I have considered people who did not have a strong publication record. You can find a diamond in the rough, so publications are not a strict filter.”

Checking References

Many lab heads say that the most important component of a postdoc application is the letters of recommendation. They also recommend contacting at least some of the references by telephone because people tend to open up more over the phone and say things they might not want to put in writing.

Many questions to ask references have to do with general qualities, such as accuracy, perseverance, creativity, originality, commitment and so on; others will be more specific to how you like to run your lab (for example, “Is the candidate a good team player?”) or address specific concerns you might have based on the candidate’s CV or something mentioned in one of the letters (for example, “Why does he/she not have any publications?”).

“I usually ask open-ended questions, such as ‘What are the candidate’s strengths?’ or ‘What are some of the issues that, as a new investigator, I should be on the lookout for?’ and then follow up on the specifics,” says **Margaret Hostetter**, Jean McLean Wallace Professor and Chair of Pediatrics at Yale School of Medicine in New Haven. “One question I always like to ask is ‘If you had the

opportunity to extend this person’s stay in your lab, would you do it?’ The answer always gives valuable information.”

You don’t need to call all references, but one person you should definitely contact is the candidate’s graduate adviser—that person will often be the one who knows the candidate’s strengths and weaknesses better than anyone. If an applicant does not provide a letter from a Ph.D. adviser, that can be a red flag. “Sometimes candidates had problems with their adviser due to personality issues and that is okay, it can happen. But it is good to hear both sides of the story,” says Polyak, who typically calls former advisers even if they did not provide a written recommendation.

Meeting and Interviewing the Candidate

Some recommend interviewing potential candidates over the phone before inviting them for an in-person interview as a way of further narrowing the choice. A 30-minute phone interview can help you gauge the person’s level of interest in your group and whether the applicant can think well on her or his feet. “I am always amazed if I describe a potential project and ask if that sounds interesting, at least a third of applicants say ‘It sounds okay’ or ‘Maybe I could do that,’” says Stockwell. “I also know what kind of people fit in well in the lab. I want good citizens who will teach students and will fix equipment. You can sometimes sense the lone wolf type and rule out some people that way.”

If you decide that, after reading the application and talking with references (and possibly the candidate), the applicant seems like a good fit for your lab, the next step is to invite him/her to spend a day in your laboratory. Typically the day would include a one-on-one interview with you, the candidate giving a seminar based on current research, and then time to interact with lab members and perhaps members of your department or university.

The one-on-one interview is an opportunity to ask the candidates in detail about the work they have accomplished, as well as to describe the projects being conducted in your lab. “I might describe three projects that we are working on and then ask ‘What would you do next in this particular project?’ This kind of question can help assess scientific acuity,” says Hostetter. “If a person has listed several publications, I will ask them about the first- *continued* »

Featured Participants

Carnegie Institution’s Department of Embryology
www.ciwemb.edu

Columbia University
www.columbia.edu

Harvard Medical School
hms.harvard.edu

Johns Hopkins University School of Medicine
www.hopkinsmedicine.org

Technical University of Braunschweig
www.tu-braunschweig.de

Yale School of Medicine
medicine.yale.edu

University of Vienna
www.univie.ac.at/?L=2

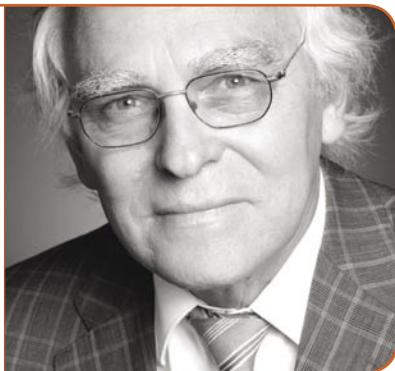
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www.hhmi.org/resources/labmanagement/moves.html

Staffing the Lab: Perspectives from both sides of the bench, Burroughs Wellcome Fund
www.scribd.com/doc/2544488/Staffing-the-Lab-Perspectives-from-Both-Sides-of-the-Bench

Faculty Positions

“I receive a lot of applications from students in China and India. In those cases, I rely very heavily on recommendations.”
—Henning Hopf



authored papers and also about the ones where they are a middle author. If they say ‘I don’t know about those experiments because I just did the Western blots,’ that tells me that they do not have an encompassing curiosity.”

The interview is also an opportunity to get insights from existing lab members. Oftentimes candidates will say things to lab members that they will not say to the head of the lab. “I can’t imagine hiring someone before first meeting them or having them meet the others in the lab,” says **Carol Greider**, professor of molecular biology and genetics at Johns Hopkins University School of Medicine. “A lab is too much like a family.”

When you are starting out you may not have many people in the lab, so you can ask members of another lab to attend the seminar and meet with the candidate. Another option is to ask more senior colleagues in your institution to interview the candidate and share their opinions with you. “I tell all my junior faculty that I am available to do that,” says Warren. One advantage of asking more senior colleagues to do the interview is that they have had more practice. “I can get it right about 90 percent of the time. If I know the faculty member and how they work, I can tell them whether a [postdoc] candidate will work well in their lab,” says Warren. “Young people sometimes are trying hard to recruit and are willing to overlook potential problems, because they don’t see them or don’t want to see them. I will point them out.”

It may sometimes be cost prohibitive to fly a candidate in for an interview. In such cases, some researchers will ask a prospective candidate to keep them informed of when they will be visiting the country, for a scientific meeting or personal travel, and then schedule an interview at that time. Another option for screening candidates who are far away is to ask close colleagues or collaborators in those countries, who know how your lab functions, to do an in-person interview on your behalf.

“I receive a lot of applications from students in China and India. In those cases, I rely very heavily on recommendations. I have several colleagues in these countries whom I know personally,” says **Henning Hopf**, a professor of organic chemistry at the Technical University of Braunschweig in Germany. “If someone I know well recommends a candidate I will trust their opinion.” In his field of organic chemistry Hopf says many German students go to the United States for their postdoctoral training, so postdocs who apply to his lab are often from abroad. “If a postdoc is from Italy, they can come over and we talk, but if people come from India or China, I never know them in advance,” he explains. “But in general I have been very lucky with people.”

Describing Your Lab Environment

The in-person meeting provides an opportunity not only for you to get to know the candidate, but also for the candidate to learn how the lab operates and judge whether it will be a good fit. “I tell them, ‘Everyone is a good citizen. You will come in and learn from other people and then you will teach others. Do you feel comfortable with that?’ Some people say ‘That is great. It is exactly what I am looking for!’ Others say ‘I guess I can function with that,’” says Stockwell.

You should also inform the candidate of everything that is really important to you in terms of how people behave in your lab. Are there certain hours that you want to have people in the lab? Do you expect a certain level of organization? How much time do you expect to spend with people and how much attention will they get?

Another thing some heads of labs think should be discussed at the first meeting has to do with your policies regarding leaving the lab as a postdoc. For example Greider says that in her lab there are three possible scenarios. “The first, the person comes and works smack down in the middle of what our lab does. I let people continue that work after they leave the lab, but if we also plan to pursue that research, I will tell them so openly. In the second, the postdoc has an independent idea and says ‘I want to do this in your lab with your support and take the project with me.’ If it is an interesting project, that is fine with me. And sometimes a postdoc ends up working on something completely different after leaving the lab,” says Greider. “We discuss these different models at the interview.”

Another thing you may want to discuss with a postdoc is the policy on authorship. In other words, what criteria do you use to decide who gets to have their name on a paper? Also, in some labs the postdoc who took the lead on a project is always the first author and the head of the lab the senior author. But in other labs that might depend on the project. If the postdoc’s work leads to a big paper that ends up in a top journal, the head of the lab might want to be first author. “It is better to discuss these kinds of things upfront rather than to wait until you are writing the paper,” says Hostetter.

Making the Decision

The final selection of a postdoc will take into account scientific capabilities and training, as well as personality. “If they don’t know a technique I can teach it to them but I cannot change their personality,” says Polyak. “I am less concerned about someone not having enough experience or training than about their having the right personality and attitude to fit in the lab.”

Indeed a particular candidate may be a great addition to one lab and thrive there, but not work out in another. “One test for me, after I meet this person, is to ask myself, ‘Is this someone I am excited to start working with tomorrow?’ If there is any hesitation I will not hire them,” says Stockwell. “It is not worth having someone in the lab who you are not excited about. With a postdoc you are making a lifelong commitment to that person, to support them at all levels throughout their career.”

Learning to hire the best postdoc for your lab is a matter of trial and error, and most people say you can only get better at it with practice. But by carefully vetting candidates and not rushing through the process, you will have a better chance of getting it right, right from the start.

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