READY, SET, HIRE

For junior science-faculty members and staff, hiring researchers is an important way to boost career success. But without management training, it's a shot in the dark. **Genevive Bjorn** reports.

hen systems neuroscientist Bijan Pesaran landed his first faculty job at New York University in 2005, he needed to hire a research team. Although he was lucky enough to find a postdoc straight away, hiring other team members seemed to be an overwhelming task. He turned to his senior colleagues for advice, which helped — but it wasn't enough. Hiring was the thing he knew least about. So Pesaran took a scientific management training class offered through the Howard Hughes Medical Institute (HHMI; see 'Making the right moves').

The class soon paid off. To find a technician, Pesaran advertised through an Internet job site, received heaps of mostly unsuitable responses and interviewed many candidates, eventually finding one whose enthusiasm outweighed her relative lack of experience. The management training course had prepared Pesaran to carry out the essential tasks of hiring and team building. Indeed, two years later, he has six people working in a productive lab and no regrets.

Making a productivity-boosting appointment is not a formal part of PhD curricula or the research culture, but poor or delayed hiring decisions can strain a young career. Navigating recruitment issues — such as how to go about finding a suitable postdoc or technician, honing your interview techniques, negotiating salary and motivating people to get the best results — can seem daunting. For many, it's a huge shock for which they are unprepared.

What's not taught

"Most postdocs don't get training in management skills," says Alyson Reed, executive director of the US National Postdoctoral Association. "But being able to put together and manage a team becomes a vital part of every scientist's career."

Management training could easily be built into career paths, perhaps in the form of mentoring or seminars tailored specifically to the needs of young scientists, says Janet Metcalfe, director of the UK GRAD Programme, an organization that provides support to postgraduate researchers. Part of it would involve making trainees more aware of the non-scientific skills they use



regularly, such as communication, organization and leadership. The first step is getting young scientists to recognize that these skills are as important as their scientific ones. "Researchers often find it surprisingly difficult to reflect on their competency in areas other than their science," says Metcalfe.

Learning about his non-scientific skills was a key part of Pesaran's HHMI training. He benefited from taking a personality profile and receiving anonymous feedback. "It is very interesting to see what people think about you," says Pesaran. "I took those lessons to heart." He has tried to improve his patience and tolerance as a result of the comments.

Several institutions in the United States and Europe, such as the European Molecular Biology Organization (EMBO), offer seminars based on the HHMI model for either science postdocs or junior science-faculty members. Cassandra Extavour took EMBO's lab management course in 2006 while doing a postdoc at the University of Cambridge, UK — before she started her faculty job at Harvard in evolutionary biology.

Compared with colleagues who don't have this kind of training, Extavour says that she is less stressed as she isn't starting from scratch. Although postdocs can focus on their research, junior faculty members also have to prioritize and juggle hundreds of tasks they know nothing about — including hiring. "The EMBO course presented some useful ideas on how to decide what's important as well as very practical advice on interviewing, hiring, team building, coaching, mentoring and conflict management," says Extavour. "I wouldn't have got this training from my job."

Javier Martinez, junior group leader at the Institute of Molecular Biotechnology of the Austrian Academy of Sciences in Vienna, took EMBO's training course in 2004. He describes it as intensive but helpful in dealing



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with issues that come up every day for scientists, including making that crucial first postdoc hire.

"Your postdoc is the person who will help you train other PhD students and will be the experienced one pipetting by your side," says Martinez. "You have to remember that you were a postdoc not so long ago." The skills he learned in the management course prepared him to make the transition from postdoc to group leader himself and to choose the right person.

Learning what hiring challenges to expect and how to deal with them is an important part of these training programmes. One common challenge faced by junior faculty members is the urge to make a decision on the basis of immediate research needs, rather than what might be needed in the next three to five years.

"It's important to think long term," says Extavour. Another challenge is feeling lonely in a new job and approaching the interviews with candidates as if making a new friend, she warns. "It's important not to forget why you are on the hiring side of the table,"

Learning a few hiring strategies is another important part of these training programmes. Writing a thorough job description before posting help-wanted ads can make the whole process more efficient. Those hiring should include any must-have qualifications, such as an academic degree; other highly desirable skills, such as experience with animals or programming; and optional skills, such as experience with certain types of reporting or writing. Being as specific as possible leads to better candidates, a faster screening process and more discerning interview questions later.

Another strategy is to compare apples with apples by asking each prospective candidate the same interview questions. It's also important to avoid asking personal questions about marital and family status, which are potentially discriminatory and illegal. And interviewers should watch for any red flags that may come up, such as lack of enthusiasm for the job, complaints about previous advisers or colleagues, or simply avoiding questions.

Once the recruitment, screening and interviews are complete, a helpful strategy for evaluating candidates is to assign each one a numerical grade immediately after the interview. At the end of the process, compare the pool and make a shortlist of the best three or four. Make an offer to the top candidate as early as possible,



Courses in scientific management can be invaluable for junior faculty members.

MAKING THE RIGHT MOVES

In 2002, the Howard Hughes Medical Institute (HHMI) and the Burroughs Wellcome Fund recognized a pressing need for additional career training. So they offered a lab-management workshop to members of their research community, which included junior faculty members and recipients of funding awards.

"The participants raved how useful it was and wanted the programme to become widely available." says Maryrose Franko. senior programme officer at the HHMI.

Instead of publishing the results as proceedings, the workshop was morphed

into a freely available book called Making the Right Moves and a training course called 'Training Scientists to Make the Right Moves'

One book chapter, for example, breaks the hiring process down into easily digestible pieces that include how to recruit, screen and evaluate applicants. It also has tips on interview questions and techniques.

The programme has expanded to become a model for scientific management training and 72 institutional departments have requested copies of the second edition of the book.

and let the others know that they are on the shortlist. Be prepared to wait for them to choose among other offers. Top candidates will be in demand. It may be necessary to offer enticements, such as a new computer and paying for publications, in order to get the best candidate.

More responsibility earlier

Not everyone waits to reach postdoc or junior faculty stage before learning essential management skills. Globally, fewer than 30% of PhD scientists go on to work in academia, which means that most researchers are looking for jobs in industry or government. Those jobs often require some management know-how.

Even without formal training, there are practical ways to go about gaining some management skills. Koen van Dam, a PhD candidate at Delft University of Technology and president of Eurodoc, the European council of doctoral candidates and young researchers, worked at developing his own relevant skills set. He helped to interview and evaluate some PhD student candidates, which gave him an insight into the hiring process.

This kind of initiative gives young scientists a sense of the nuts and bolts of hiring. "Even if you've received some scientific management training it is very useful to have a working general knowledge of local labour laws and hiring practices," says Extavour. She also recommends finding out as early as possible about the department's specific recruitment practices, because extra layers of paperwork could add more time to the hiring process.

Figuring out how to make a career-boosting appointment at the junior faculty or staff phase requires a self-awareness that less-stressed researchers seem to grasp: acknowledging that scientific management skills are needed, knowing where to look for help and mustering the resources to go and do it. The longterm career pay-off of making a successful first hire is potentially huge — whether it's winning a future tenure bid or landing a dream job outside academia.

And scientific management training is a key component in the drive for success. "Postdocs are excited about it. Junior faculty are desperate for it. But senior faculty still tend not to see the point," says Extavour.

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Correction

In the Regions story 'Argentina's pivotal moment' (Nature 451, 494-496; 2008) the picture caption on page 496 transposed the names of the two people. Marcelo Rubinstein was pictured top, and Martin Giurfa was below.