COLUMN

How to navigate the road ahead

University administrators need to understand growing trends if they are to train their postdocs properly and still advance their research efforts, argues **Rania Sanford**.

niversities and their postdocs have a mutually beneficial relationship: universities rely on postdocs for the day-to-day work of the lab, whereas postdocs benefit from a chance to advance their skills and build a research portfolio. But the growing number of postdoctoral researchers in the United States and elsewhere brings with it new needs for postdocs and challenges for institutions. In the coming decade, faculty members and administrators must think more strategically about postdoctoral training, both to distinguish their institutions and to prepare their postdocs for a competitive job market. Several aspects of the postdoc experience require special attention, and a call to action for administrators.

The first challenge to be addressed is mentoring, or the lack thereof. It is a perennial topic of concern, perhaps because academic hierarchies encourage a publish-or-perish culture that leaves little

time for trainees to learn or seek guidance. With young scientists increasingly requiring guidance to navigate the complex and competitive world of science, mentoring will increasingly be regarded as an important aspect of an institution's reputation. Recent graduates will come to know where to go for mentorship that leads to a meaningful experience, strong science results and a desirable job. They will also know the places to avoid. Such reputations will affect the destination of talent and, subsequently, grants.

Administrators should recognize that good mentoring is an acquired skill, and should help their faculty's principal investigators to improve. Faculty members should be taught about the stages in developing a mentoring relationship — coaching versus supervision, building trust with protégés and postdocs' expectations. Mentors can't simply replicate the ways in which they were mentored — generational differences matter. For example, e-mail and social-networking sites have a huge impact on communicating, collaborating and networking with colleagues.

Status is another looming challenge. Are postdocs considered students? Or staff? Both? Or neither? Administrators must recognize that not all positions are created equal. At many universities, postdocs who are paid from grants are treated as staff, whereas those who have their own funding or fellowships (some



of which are competitive awards given to top researchers on their way to scientific independence) are classed as 'fellows'. This bifurcation results in different treatment when it comes to medical insurance and other benefits, for which fellows often get the short end of the stick. Administrators should find out whether their institution's system rewards or penalizes the top researchers, and consider forging policies and raising institutional funds to support a level playing field.

EASING THE WAY

Foreign postdocs raise special considerations. Despite their large numbers, especially in places such as the United States and Britain, they often lack clout. Not enough is done locally or nationally to support their entry to, or presence in, the country. The delays and repeat interviews with every J1 visa renewal in the United States can be daunting. Faculty members should learn about ongoing discussions of immigration reform and provisions that could potentially affect postdocs, such as reforming security clearances for scientists. Administrators in the United States can write to their representative, NAFSA: Association of International Educators in Washington DC, or their university's government-relations officer to share information about the plight of foreign postdocs, and explain why they are so important for science.

The trend towards unionization in several US states will also affect the postdoctoral experience for the foreseeable future. Last month, the University of California system reached an agreement with PRO/UAW, the union representing postdocs on all the system's campuses. With unions in place, administrators, faculty members and postdocs alike will be working in a new framework that constrains the terms of their interactions. Unionization brings new fiscal and administrative requirements that institutions must monitor.

The final challenge is the extent of support services. Most universities do not provide postdocs with the facilities to which many undergraduate and postgraduate students have grown accustomed, such as counselling, activities, academic support and career services. Even though postdocs are partly trainees, receiving an education that prepares

them for a chosen career, many campuses do not have the resources to provide such services for enriching and enhancing their experiences. The predominant model for supporting postdocs at most universities is the one-stop 'office of postdoctoral affairs', headed by a director who deals with all things postdoc. Over the past several years, such offices have sprouted up in the United States at an astonishing pace. Although the model supports advocacy efforts by emphasizing the unique status of postdocs hybrids between student and staff — it is time to introduce a new generation of institutional support, particularly as the number of postdocs continues to rise and their needs become more diverse and complex.

The postdoc situation is very different today from what it was a decade ago. And ten years hence, it will look drastically different again. Universities are at a critical juncture, with new policies and the potential for new laws that will affect how organizations conduct post-PhD training. Science administrators must take stock and map the road through which they wish to navigate their institutions and their postdocs — or they might just get lost. ■

Rania Sanford is the assistant dean of postdoc affairs at Stanford University School of Medicine in Palo Alto, California.