

The inside track from academia and industry

Time for a change

Universities, businesses, students and employees all need to rethink they way they approach training.



Michael Alvarez

Advancing science through academic research isn't inherently at cross-purposes with the scientific trainee's career progression — but sometimes it seems that way. There is an inherent tension between the two, because universities need graduate and postdoctoral researchers to keep labs productive, while the graduate students and postdocs require training, independence and permanent positions. For institutions to align these endeavours successfully, they need to consider greater career support for scientific research trainees.

A broad, long-standing practice in business called 'change management' provides frameworks and methods for helping organizations move from an existing model of operation to a more adaptive one. Science could be well served by borrowing one of its processes called 'merging agendas' to bring together the goals of early-stage scientists and of the universities where they train.

Put simply, this process involves identifying areas where the interests of different parties overlap, and acknowledging that interdependencies exist. This is an important part of any successful strategy, as resistance to change from those adopting a new system or process typically decreases as the awareness of mutual dependence, goals and benefits increases. In addition to

moving the parties beyond resistance, the process can actually help engender enthusiasm, energy and excitement for change.

It is clear that different university environments are unique, and there is no single model or approach to enhancing career services that can simply be copied from one campus and taken to the next. Nevertheless, there is common ground in the challenges that universities and their trainees face, in light of their shared desire for high-quality research and good career progression. Despite the challenges involved in making such changes, there is some encouraging evidence of a trend towards improving career support for scientific researchers within certain academic environments.

In my experience establishing the medical and life-sciences career centre at the University of California, San Francisco, and now at Stanford University, I have seen a variety of approaches to enhancing the training experience to include more adequate career preparation. From grass-roots student-led initiatives, to fully fledged university commitments to building comprehensive career centres — and others in between — the efforts can yield widely varying degrees of success.

On the basis of input and observations gathered from administrators, deans, career services professionals, trainees

and scientific journals that I have consulted along the way, I can say there are some noticeable characteristics (see 'Who should be doing what', below) that bode well for bringing the agendas of trainees and universities together.

As within any campus community, there will be a range of mindsets, biases and/or priorities represented; some agendas will be revealed, some hidden. To successfully bring research and training into greater alignment, the participating groups must reconsider their roles and commit to making the necessary changes. Once people accept that assuming these responsibilities is non-threatening and in fact healthy, performance can be mobilized and greater results achieved at both the individual and the organizational level.

Trainees must think more about how to help themselves and take ownership for their careers, although university administrators and faculty members must be willing to see the promotion of the trainees' careers as one of their significant duties or obligations. To advance the research cause of an academic institution without attention to the career development of the individual trainees is a formula that may have worked in the past. But, given the needs and challenges of the global labour market today, it seems very much less tenable.

By looking at the respective agendas through a common lens, the two endeavours can be seen as parallel and beneficial to one another. Although the process of change is a slow one, it is possible and even inevitable. The people and institutions that embrace the opportunity to blend their agendas are likely to be at the leading edge, both in their research and in their careers. ■

Michael Alvarez is director of Stanford University's School of Medicine Career Center, Stanford, California.

WHO SHOULD BE DOING WHAT

University/institution obligations and responsibilities

- Departments and faculty members must accept the need to change and reject the status quo.
- Schools and universities must show commitment to strengthen career resources.
- Qualified, professional career advisers should be available for confidential services.
- Deans and administrators must work together to address problems in the system.

Trainee obligations and responsibilities

- Structure formal steps to explore careers outside academic research.
- Do not assume that job-market and career matters will simply work out on their own.
- Remain active in career planning throughout the training experience.
- Understand and evaluate multiple career choices before making decisions.