

Careers

Dear Junior Faculty: Some Wise Advice! Love, the Panel

If you had known at the beginning of your scientific career what you know now that you've been doing it for a while, would you have felt more confident in your career choices? The Committee for Professional Opportunities for Women (CPOW) gave the floor to early career scientists at the Biophysical Society's 54th Annual Meeting to raise this and related questions to a panel consisting of both department heads and the recently tenured. *Ruth Heidelberger* moderated as panelists *Jack Kaplan*, University of Illinois, *Dorothy Beckett*, University of Maryland, *Merritt Maduke*, Stanford University, and *Dan Minor*, University of California, San Francisco, spoke up about what they know now that would have helped their younger selves back then. Some highlights of the discussion follow.

Thoughts on Managing People

When you're looking to take on grad students and postdocs, be discerning, Maduke advises; resist the temptation to simply select anyone interested in your project. Once you've chosen, be present in the lab to teach them your skills—don't disappear and leave them with all the lab work. As Beckett points out, new faculty often forget that they're the best hands in the lab. In Minor's words, "you must lead from the front" to set the tone of your lab's work environment and get the desired results from your assistants. Minor compares starting a lab to starting a small business, with all the trappings that come with it: staffing, finances, resources,

productivity. You are ultimately responsible for the combined success of these elements: a smoothly running lab.

While you're in the lab, get to know your postdocs and grad students so that you can learn how to manage them. As Kaplan puts it, people are different from other resources: Make use of their skills and don't try to make them clones of yourself. It helps, Maduke adds, to get to know each person as an individual. The better you know someone, the better you can learn to manage them effectively. Because not everyone has the same goals, work habits, and personality, being receptive to individuality and adjusting your management style accordingly is crucial.

Additionally, Minor notes, don't fall in love with anybody in your lab. If someone isn't working hard enough, don't ignore this person's lack of work ethic in hopes that he or she will undergo a complete personality about-face. Address the problem quickly and humanely; you'll be doing that person a favor.

For more tips on how to manage your lab and the people in it, check out the Howard Hughes Medical Institute's book (downloadable as a PDF) *Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty* at <http://www.hhmi.org/resources/labmanagement/moves.html>.

Truths about Managing Life

Unfortunately, there is no catch-all solution to the career-versus-family conundrum: It boils down to individual choices. Kaplan's advice is to think introspectively about your priorities and goals, and envision how you would like your life to go. Once you've done this, the panel agrees, you must be prepared to compromise and even make sacrifices.

The concept of waiting until your career settles down before starting a family is un-

realistic; your entire career will likely be a busy one, and you'll miss your chance at family life. On the other hand, if you desire above all to be in the lab 24/7, you will have no time left to devote to having a family. Finding the balance is tough, but if you decide that you want both a career and a family, you just have to jump in, and compromise as you go. It can be done if both partners are willing to contribute. Beckett suggests splitting the kid-caring tasks fifty-fifty with your partner, and hiring some outside help for the housework. As with all academic careers (not just science ones), you must be prepared to give up something to get something else; you can't have your cake and eat it, too.

Reflections on Career

The crux of a satisfying and even a happy scientific career is to know that where you are is where you want to be, in Kaplan's words. Different places have different priorities and different expectations of what adding you to their ranks can do for them. Since you can't change these stipulations, your goal should be to find the place where the set priorities and expectations line up with your own. Spending your professional life somewhere that doesn't suit you, he says, does not a contented professional make. "The way you are now is the way you want to be," says Kaplan. It's never too late to plan a career move, the panel advises. Keep searching until you find a good fit between you and your employer.

Another useful rule of thumb: Don't fall in love—not with your institution, not with your employees. Keep your career path on your own best professional track by maintaining loyalty to individuals rather than institutions. The days of the departmental dean looking out for his or her faculty are gone. As Beckett puts it, the top-down institutional hierarchy that evolved instead has led to a breakdown in the feeling of loyalty among the faculty. In some labs, PIs try to manufacture a feeling of loyalty among lab members by maintaining the illusion that the

lab is one big family. This leads to misplaced loyalty to a lab, and gets in the way of individuals getting the most out of their work, says Kaplan. Be a good colleague, but know that you are at work, and remember that your workplace is not your home.

With regard to salary and resources, be sure in your own mind what you want before you start negotiating, Kaplan says. Beckett advises that you compile a list of what you want in spreadsheet format and provide it to prospective employers. That being said, don't play above your game, Minor cautions; applicants for their first faculty position should remember not to ask for too much right off the bat because their appointment depends on the support of a lot of people. If you have multiple offers, however, go ahead and ask. Remember too that the department hiring you wants you to succeed, and will be invested in helping you excel, Kaplan points out. At most institutions, people do get tenure. Current faculty members should constantly show their institutions that they work hard to get external funding—and their departments may provide matching funds, Beckett points out. Apply for grants. Get that first grant application in as soon as possible, and continue to apply for more. The devil is in the details—don't get so entrenched



in every scientific detail that you never send in your application! In Kaplan's words, you can't win the lottery if you don't buy a ticket.

A big part of doing your research is publishing the results. When considering the speed versus quality question, always default to the culture of your scientific field. Each field has its own set of expectations and regarding publishing frequency and quality of published work, so be sure to address those expectations. If you're switching fields, be sure to learn the publishing culture of the field you're transitioning into—it may be vastly different than the field you know, and you'll want to be on top of it.

Grad Students, This One's for You

As a grad student in biophysics, it often seems as though there is nowhere you can go to find answers, because nobody knows what the answers are any more than you do. The best way to deal with this is to carve a path for your-

self professionally: adopt a rigorous research mentality, take care of the equipment you use, and help your colleagues when they ask for it, advises Beckett. Maybe your labmates will take the hint and get responsible themselves. By the same token, nothing can prepare you for your role as new faculty when you do land that position. Read up on people management to help with the people problems you'll encounter, which will be more prevalent than science problems.

There are two sides to choosing to work with junior faculty. The upside is that you will get lots of individual attention and a mentor who is invested in your success. On the downside, it may turn out to be a rather high-anxiety experience because the new faculty member will also be learning the ropes. It may be worth it to learn from someone so immersed in that field, says Maduke. You'll be learning from each other.

Members in the News



William G. Noid (top) of Pennsylvania State University and Society member since 2006, *Garegin A. Papoian* (bottom) of the University of North Carolina, Chapel Hill, and Society member since 2008, and *Jana K. Shen* (not pictured) of the University of Oklahoma and Society member since 2005 received HP Outstanding Junior Faculty Awards.



Nadrian Seeman of New York University and Society member since 1996 received the 2010 Kavli Prize in Nanoscience as well as a 2010 Guggenheim Fellowship.



Watt Webb of Cornell University and Society member since 1996 was named recipient of the Alexander Hollaender Award in Biophysics.



Timothy A. Cross (not pictured) of Florida State University and Society member since 1996 was presented with the 2010 Florida Award.