

Welcome!

by Susan M. Fitzpatrick

Welcome to The Road Taken, a column exploring the strategies women in science use to help manage their lives and careers in science, technology, and engineering (STE). The stereotypical STE career paths can, at times, seem narrow compared with the increasingly broad range of interests, styles, and goals of the diverse individuals attracted to study and work in science. The presumption that graduate students and postdoctoral fellows desire to walk precisely in their mentors' footsteps artificially limits career options and could even discourage some individuals from pursuing scientific training. Scientific training is, in reality, the stepping stone to an array of fascinating career opportunities. Today's scientific workforce doesn't look quite like the scientists of the previous generation and, as a result, may not have ready access to the implicit, insider knowledge that nurtures careers. This column will try to make the implicit, explicit --and hopefully create a channel for sharing the secrets of success. Reading here about different choices and paths may inspire you to branch out in a new direction. Most importantly, I hope the individuals and ideas profiled in the column will create a broader definition of "career" and "success."

The powerful poetic image that Robert Frost created about the road not taken inspired the column's title. Even if you have not read or studied this poem in school, the image Frost created of a road diverging in the woods is a powerful pop-cultural metaphor influencing the way many of us think about the important choices we make in both our careers and our lives. Daydreaming about the road not taken allows us to imagine what might be or what might have been and escape from the reality of negotiating the road taken.

Despite the moving imagery of the poem, most of us never actually stand at the place where two roads diverge. We rarely, if ever, encounter a clean either/or decision where the outcomes irrevocably influence every aspect of life thereafter. Some of us may start out thinking we know just which superhighway will get us to our desired destination -- we know exactly where we want to go and we just want to get there fast only to find that we might have misread the map. For most of us, life's journey means setting off down the road not quite sure where we'll wind up. How we'll negotiate the twists and turns, dead ends, and those "T" intersections requiring a random choice of direction is what makes real life an unending series of decisions. At one time or another, we'll backtrack, lose our way, speed up, slow down, and take rest breaks. Sometimes we scrap the trip and start from scratch. Hopefully by sharing stories, strategies, and solutions about our career journeys, we can help one another and make the trip less stressful.

One strength of AWIS is that its members are drawn from many scientific disciplines and professions. We can learn a lot from one another. There are few career issues that are truly discipline- or profession-specific. Strategies effective in corporate or government settings can, with some translation and tweaking, readily transfer to the academic setting (and vice versa). The breadth of experience of the individuals profiled can help increase the tools available in our career management toolbox.² My professional background is weighted toward academia and nonprofit administration, so I am more aware of the issues and challenges encountered on those career tracks. I hope you'll send me suggestions and feedback about individuals or topics representing a broader diversity, including the corporate and entrepreneurial worlds.

Aging in Place

The first few columns will explore the idea of "aging in place" and I'll start by examining the persistent academic career mythology that pursuing postgraduate training or taking your first faculty career position in the department or institution where you trained as a student is a no-no. The common wisdom is that numerous advantages accrue when you pursue your postdoctoral training or your first faculty position in a different environment. In the department in which I trained, the idea that going to another institution was essential to your development as a scientist was so strongly held that staying on was simply not permitted. I have also heard that in certain corporate circles leaving the company or accepting relocations and transfers is an essential requirement for advancement. But what are the consequences if

moving, for whatever reasons, is not an option? Does staying in place as you transition from student to independent investigator really sound the death knell for your career?

No one can argue that there aren't advantages to changing institutions as you transition from student to faculty. Most obvious, of course, is that your new colleagues are meeting you in your new role. You don't have to worry about whether colleagues who once saw you as a "trainee" will now accept you as a peer. Moving creates opportunities for interacting with new colleagues, acquiring new skills, gaining new ways of thinking about your work, and adapting to a different physical environment. Change can be incredibly rejuvenating for your energy and enthusiasm. Changing institutions broadens your existing network of contacts and mentors. On the flip side, there are equally valid reasons a move might not be in your best interests or in the best interests of your research. If you chose to "age in place" what strategies can help smooth the transition from student to faculty?

To gain some insights on this question I interviewed two young faculty members in the department of psychology at Washington University-St. Louis, who appear to be successfully "aging in place" (although they are chronologically quite young!).

Randy Buckner, a tenured Associate Professor, earned his undergraduate and graduate degrees from Washington University. Randy, a cognitive neuroscientist, uses functional brain imaging to study cognition. By any measure, Randy is an academic success story. He has already received many honors and awards. He is well funded, is internationally known for his research, and says he loves his life. Randy did leave Washington University for brief postdoctoral training at the Massachusetts General Hospital while maintaining an ongoing collaboration with his colleagues in St. Louis so it might be argued that by strict definition he is not "aging in place." Still, he knew that establishing his faculty career in his undergraduate department and at the same institution where he pursued his doctoral degree meant the senior faculty had to accept him in a new role. Randy cautiously evaluated the pros and cons of accepting an offer from Washington University. He'd heard the common wisdom that establishing an independent reputation at the institution where he trained was risky. Randy's Ph.D. mentors, Steve Petersen (his primary mentor) and Marcus Raichle, cast very big shadows. Petersen and Raichle are internationally renowned in cognitive neuroscience and are considered pioneers of functional brain imaging.

What factors positively influenced Randy, who received offers from several prestigious psychology departments, to return and to plan to stay at Washington University? First and foremost, Randy believes Washington University is the best place to pursue his research. He feels he benefits from the continued collegial support of Petersen, whose intelligence and scientific knowledge he respects and admires. He knows from experience that Petersen, Raichle, and others on the faculty generously and actively credit the independent work of their junior colleagues. Randy admits that staying on at an institution where the work of students and fellows is automatically identified with the faculty mentor could impede establishing an independent reputation. Randy also thought the timing of his return was favorable. The Psychology Department had just recruited a new chair (see below) who was actively recruiting new faculty members, so there would be plenty of fresh faces.

Kathleen McDermott, a tenure-track Assistant Professor, is negotiating a somewhat different set of hurdles along her career path. Kathleen came to Washington University as a postdoctoral fellow when her doctoral research mentor, Roddy Roediger, was recruited as Chair of the Psychology Department. Kathleen is "aging in place" in a somewhat different sense. Although her first faculty position is not in the same department where she trained as a student, she is establishing an independent research career in the department chaired by her long-term advisor and mentor --with whom she maintains an ongoing research collaboration. Kathleen, like Randy, recognizes the potential pitfalls that come with "aging in place." Moving just for the sake of moving is not worth the disruption and loss of productivity. Kathleen is confident that her work is identified as her own and does not want to lose the intellectual give and take she shares and enjoys with Roediger. She strongly believes Washington University offers the best environment for her work. Kathleen eased her transition to the Washington University Psychology Department faculty by pursuing a period of postdoctoral training with the brain imaging group housed at the Washington University School of Medicine. She benefited both by immersing herself in medical school culture -- a world apart from main campus departments -- and

from acquiring a new aspect for her research, functional brain imaging. Her strategy is worth considering if a true physical relocation is not in the cards. A "pseudomove" such as changing campuses within an institution can offer many of the same benefits that come from changing your geography. While it will be a few years until Kathleen is considered for tenure, she certainly seems to be on the right track. She has successfully secured independent funding, is attracting students and fellows into her lab, and has a number of scientifically significant independent publications.

Randy and Kathleen offered some practical strategies, applicable not only to scientists aging in place, but to anyone facing the transition from protégé to peer. Because scientists spend so much time in training, they can be slow to accept that they are no longer "junior." Aging in place can exacerbate the "imposter syndrome," that disquieting sense felt by many new faculty that their accumulating seniority and prestige are somewhat undeserved and that it's only a matter of time before colleagues realize it. Kathleen and Randy found that even the most senior scientists still have twinges of that feeling, so the "imposter syndrome" no longer worries them. During our conversations, they both mentioned that, superficial as it sounds, it helps to change your outward appearance. An obvious way to accomplish this is to dress more professionally or to change your glasses or the way you wear your hair. While they both still socialize with students and postdocs in the department, they follow the lead of more senior faculty about the right time to call it a night.

They also agree that when "aging in place" there are times, for instance during departmental seminars, when you may have to clarify how credit is attributed to research. Each has corrected a speaker who discussed research from their independent laboratories as though it had been carried out by the laboratories of their more senior mentors. Enlisting others, particularly your collaborators, to help you with this process relieves some of the pressure on you. It is also a good idea to be receptive to collaborative links with senior colleagues other than your prior mentors or colleagues. While the motivation behind such projects should always be the excitement of the science that will result -- your intellectual contributions to these working relationships can strategically enhance your reputation as a creative and independent thinker.

Kathleen and Randy warn against the temptation to "age in place" if you have unresolved issues with your mentor or department. Such difficulties will only intensify with the added strain of the changing dynamics of your relationship. Kathleen and Randy felt comfortable in their decisions to remain at Washington University because their analyses of the cost/benefit indicated they could truly flourish there. Both are successfully negotiating the transitions they need to make by consciously acknowledging that their decisions came with challenges and then trying strategies explicitly geared to meeting the challenges. Randy and Kathleen also benefit from their camaraderie, so making an effort to reach out to other junior faculty -- even if in another department can help.

In the next column I'll revisit the idea of "aging in place" and focus on later career transitions. I plan to explore the strategies that can help you successfully navigate the potential career potholes even the most senior scientists encounter. It is not unusual for senior academic administrators (dean, provost -- or even president!) to have had long histories with their universities. Similarly, I plan to ask senior scientists about the strategies that helped them move up the ranks within a corporation. Can you imagine spending your entire career at one institution? Does being a longtime insider help or does it bring additional challenges to what are already demanding positions? If it's your dream to be dean or vice-president - watch for the next issue!

1. "The Road Not Taken," by Robert Frost can be found at <http://www.favoritepoem.org/poems/frost/>.
2. I want to clarify that by "career management" I do not mean "careerism." While I feel strongly that achieving a satisfying career requires nurturing, this is not the same thing as careerism, where all that matters are the superficial features of getting ahead.