

# Why You Should Be Mentoring a Scientist, Right Now!

By Monica Horvath

If you ask scientific professionals their opinions on mentoring, you will find that most are supportive of the concept and agree that it is important to cultivate the careers of our future scientists. However, you are less likely to find that the majority of scientists believe they have time for such relationships while already juggling the balls inherent in maintaining a good balance between work and a social life. This misunderstanding of how mentoring fits into one's task list can cause great potential mentors to miss out on connecting with the next generation of scientists as well as to forgo the numerous benefits received from such interactions.

MentorNet, the E-Mentoring Network for Diversity in Engineering and Science (<http://www.MentorNet.net>), works with this obstacle daily in trying to recruit scientists for its One-on-One programs, which match protégés from well over 100 participating campuses and affiliated partners to counterparts in industry, government laboratories, and higher education. MentorNet's mission is to further the progress of women and other underrepresented groups in scientific and technical fields through the use of a dynamic, technology-supported mentoring network. Participants work through a coaching curriculum that prompts advice and discussion for students, postdoctoral scholars, and early-career faculty embarking on science and engineering careers.

MentorNet regularly conducts evaluations as well as specialized studies based on the experiences of their members. From this rich dataset, MentorNet has identified numerous reasons why mentors participate in the career development of young scientists. Taken as a whole, these form a compelling argument for why setting aside time for mentoring is in the best interest of every scientific professional.

## **Nourishing a Sense of Philanthropy**

When asking busy scientists why they devote time to mentoring activities, by far the most common reason is that it provides a way to give back to a community that has enriched their own careers. Almost everyone realizes that their career success has been due in part to the kindness of others during their passing through the scientific trenches, and many simply want to return the favor. One MentorNet mentor discloses, "I feel that for the most part, I find myself mentoring based on the advice I wish that I would have had. I also find myself drawing a lot on my current experiences and how I respond to them or wish I would have responded to them!" This is not to say, however, that engaging in mentoring activities is only a Karma-driven endeavor. Dr. Harold "Skip" Garner, Professor of Biochemistry and Internal Medicine at the University of Texas Southwestern Medical Center, explains, "Charity is not just writing a check, but more important, it is giving your time. If successful, my efforts will be amplified through the success of those I mentor, who may also go on to do their own mentoring.... Science and business suffers from any

loss in productivity as a consequence of a person not benefiting from a mentor."

## **Professional Development and Networking**

Invariably, mentors often discover that by taking part in a formal advisory program such as MentorNet or by even advising acquaintances informally, they are enhancing valuable skill sets that can be tapped during their daily responsibilities. As one's career develops, responsibility and obligations increase concomitantly, such as in the case of management duties. On-the-job instruction is the province of the seasoned professional, and mentoring can be an excellent way to practice acting in an advisory role. Mentoring may also help one learn how to discuss sticky topics that involve opposing views of a given situation. One participant from academia notes, "I chose to become a MentorNet mentor because I wanted to help others learn how to achieve their career aspirations. After I began mentoring, I discovered that this service helped to fulfill community and professional service obligations at my institution. Thus, serving as a mentor has helped me with my own career advancement." A mentoring relationship can also help one better understand where the concerns of young scientists originate, particularly with regard to breaking into a scientific discipline and becoming noticed. Such issues may be dramatically different than those experienced by the mentor as he was beginning his career, particularly in an era of flat or decreasing scientific funding, which inevitably translates into fewer permanent jobs. Dr. Gary D. Grossman, Distinguished Research Professor in Animal Ecology at the University of Georgia, Athens states, "...you always learn new things from interacting with new professionals or students. They see things through different eyes and learning about how they experience things differently is always beneficial..." For those in academia, there are very specific benefits, such as being better positioned to compete for new talent to fill tenure track spots. Similarly, an Associate Professor of Biology and MentorNet mentor explains, "...it has helped keep me in touch with the skills and experiences that scientists on the job market are competing with currently - this has been useful on search committees."

Such strategic advantages are not limited to the academic world. Industrial mentors also find that participating in a mentoring relationship provides practice for managing the personalities on a team. One MentorNet mentor at Abbott Laboratories says, "As a group leader in an industry setting, all of my mentoring experiences have significantly contributed to my approach towards managing my own group. I like to think that I'd be much better at finding a job and functioning in my career based on what I have learned from my protégés." Individuals receiving quality mentoring usually end up tapping their mentors' professional networks over the course of a successful relationship, but prospective mentors do not always realize that this is a two-way

street. Protégés are often in touch with a greater number of younger, up-and-coming professionals that can act as excellent contacts or collaborators whether the mentor hails from industry or academia. Young, tenure-track academics end up developing their own research programs and participating in grant reviews. Start-up companies are common entrance points for those in the biotechnology industry, and these individuals often rise through the ranks quite quickly as the company expands. In the currently tumultuous biotechnology and pharmaceutical arenas, this can provide a strategic advantage when any professional is faced with the unpleasant realities that may come with division restructuring.

#### Self-reflection and Self-renewal

Most of us simply do not have the time to wax poetic about the roadmap to a career, but mentoring can cause even the most hectic nunc-centered individual to pick up a philosopher's hat. Dr. Garner explains, "I have grown to not be amazed by the circumstances that require me to intervene in the activities of those I mentor in their development or their work. It has enriched me with patience, with intellectual expansion required for deconvoluting complex problems that arise, but mainly, it has brought me pleasure." Mentoring can offer a healthy respite from the daily 'hustle and bustle' of meetings and task lists, which usually preclude one from sitting back and considering how one's broad spectrum of experiences culminated in his or her current position. A scientist at Pfizer states, "Explaining my career choices as an industry R&D scientist helps me reflect on why I am where I am today, how I feel about where I've gotten to, and thus it compels me to think about how I feel about my 'current career state' and what I may want to do to change it." That is, the unmapped nature of a protégé's prospective vocational path can remind mentors that career choices are not written in stone. If one is unhappy with a work situation, mentoring a young scientist may remind him that transition is more than possible.

#### Mentoring Among a Sea of Deadlines

Even for the most time-strapped individual, there are numerous other ways to pass along career development wisdom, even if one is not outright acquainted with the individual they are advising. MentorNet's One-on-One program is an entirely electronic mentoring option that matches individuals from all over the world. Mentors can be from any work sector (industry, government laboratory, higher education, non-profit, etc...), and MentorNet provides a schedule of suggested email discussions for the mentor-protégé pair. Participation generally takes less than twenty minutes a week, and an eight month commitment is required. Although participants can, of course, interact more often and even extend their acquaintance to include telephone calls or in-person meetings, MentorNet's initial arrangement provides an element of structure to the relationship and necessitates only an email account and willingness to correspond regularly with a protégé.

And as for even less formal options, web logging, or 'blogging' has become extremely popular and has the potential to reach a wide audience. A blog is an individual's web diary usually posted in reverse chronological order, and can be a great way for scientists to post news and commentary on any topic they desire. Usually there is an option to permit reader comments per post, which can facilitate a dialog. There are numerous providers of free blogging services, and just even a few posts a week on one's

work environment, struggles, pet-peeves, or pet-delights can provide invaluable insight into what it is like to follow a particular career. For example, Dr. Jane Chin at <http://phdcareerclinic.com> posts a bevy of articles for scientists at all stages that go beyond the typical 'How do you write a CV?' and 'How do you get an industry job?' lines of questioning. In her posts, she provides numerous unique ideas for developing skill sets such as participating in improvisational classes to learn how to step outside of one's comfort zone.

Scientific message boards provide yet another informal option to spread one's thoughts and wisdom. Science Magazine has a thriving forum ([www.sciencereaders.org](http://www.sciencereaders.org)) moderated by industry talent scout Dave Jensen, and covers topics related to employment and career development in science and engineering for both the industrial and academic milieus. Although participants must register, the public face of forum participation can be completely anonymous, which has drawn posters from a wide range of both introductory and high-level positions. Prospective mentors may find these activities a great supplement to their existing relationships, or at least use them to remain connected with other scientists looking for advice and wisdom.

Even with the flexibility that electronic avenues can provide for the interested yet time-constrained mentor, keeping a healthy work-life balance is a challenge. But established professionals such as Dr. Garner advise that one should make every effort to incorporate mentoring despite such obstacles. "The world has just become that complex. We are all addicted to the internet and to our professional lives. Given that, I choose to add mentoring to the list anyways...I integrate mentoring with the components of my job, but I also intertwine it with my personal life. Sometimes it requires me to arrange social meetings outside of work in environments that are more comfortable for discussions about personal career development. I have realized that mentoring is part of my life, not just part of the job." Dr. Garner's comments emphasize that communication is the essence of mentoring, and those willing to take part invest in a brighter scientific future for us all. The development of a satisfying scientific career cannot be achieved in a vacuum, and the future of science is dependent on the willingness of established professionals to donate precious pockets of time. ■



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