# Secrets to Success for Life after Graduate School

Peter Fiske, Ph.D., researcher, entrepreneur, CEO, and writer, captivates doctoral and post-doctoral researchers eager to put their degrees to work!

By Joe Cribari and Fabian V. Filipp

Many Ph.D.s now question the traditional career path set for them by their programs. Are graduate students only pursuing a progressively specialized process for a single career path in academic research? The facts show that most advanced degree students are in a comprehensive program that can qualify them for any number of career paths both in and beyond academia.



Scientist and author Peter Fiske addresses packed audiences of Ph.D. and postdoctoral researchers at toptier research universities around the country regarding career planning and the job hunting process. And with the dire state of the world-wide economy, becoming a *career savvy* researcher is more important than ever.

Even Fiske acknowledges that the often complex process of career exploration is challenging. His own career trajectory took some unexpected directions, as he explored the right path for him. Upon earning his

Ph.D. in Geological and Environmental Sciences from Stanford University in 1994, and following a 3-year stint as a post-doc at Laurence Livermore National Laboratories (LLNL), his first "real" professional experience broke from academic tradition. At the chagrin of his advisor, he decided to pursue a policy job in Washington D.C. as a White House Fellow. There he applied his knowledge and skills in the Clinton Administration as Special Assistant to the Secretary of Defense for Special Projects. Following his Washington experience, Fiske headed back to the lab and a research position at LLNL.

However, wanting to exercise his entrepreneurial spirit and more control of his career direction, Fiske took a risk and co-founded RAPT Industries, a spin-off from Laurence Livermore Labs, where he eventually took on the responsibility of Vice President for Business Development. He is presently the CEO of PAX Mixer, Inc., an engineering research firm located in San Rafael, CA. Fiske is also a nationally-recognized author, penning the popular <a href="Put Your Science to Work: The Take Charge Career Guide for Scientists">Put Your Science to Work: The Take Charge Career Guide for Scientists</a>.

## **Develop a Professional Network**

Fiske's talk focused on the importance of "Networking." Ph.D.s often feel awkward and unprepared to network. However, graduate students network all the time; academia just doesn't tend to call it that. "When you go to a

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meeting and present a poster, it is not just scientific communication; it is networking" Fiske says. "You stand by your poster for three hours. Out of ten thousand people, three other 'weirdos' who

care about your subject come over and introduce themselves to you. You make a connection and do valuable networking." Effective networking is nothing more than building relationships with people who share your personal and professional interests, and keeping in touch. "An important thing that should be on every [student's] mind is how they develop their professional network, who they are getting to meet, who they are getting to work with, and what opportunities are being created as a result," Fiske advises.

Fiske stressed that the worst situation graduate students could find themselves is stuck within a research group with no outside collaborations, and a lack of interactions with peers in other universities or industry. "If you find yourself caught in a very small environment you need to bust out!" Fiske says. How can you effectively expand your professional network? Most people love to talk—especially about themselves—and becoming an expert networker just takes the ability to ask good questions and listen—something anyone can do.

## **Enhance the Mentoring Experience**

Fiske compares the relationship of academics with their students to parenthood. Mentoring is a very personal relationship, and the best mentors might not be your advisors. "Even the best intentioned and loving P.I. [Principal Investigator] will have a set of goals and agenda that may not necessarily entirely coincide with your own goals," Fiske warns. "Other people you can develop collaborations with, who do not have any line of authority over you, tend to have a much better perspective, and can be much more supportive of you without any of the baggage that comes with also being a supervisor. Collaborations are the way that you will build your career: by branching out and working with other people," Fiske recommends.

According to <u>Re-envisioning the Ph.D.</u>, a comprehensive study completed in 2003 by the University of Washington, only one out of ten students will end up in academic research. So, what about the other nine? "[Grad school] is a marvelous experience", Fiske remarks, "giving you time to explore your own direction. Anyone's career options critically depend on the professional network they develop." Lastly, students need not look further than the title of the recent book by Nobel Prize winning biologist James D. Watson's, which also provides advice and strategies in building the right relationships and networks to advance a Ph.D. career. It's aptly titled—Avoid Boring (Other) People!

### **Recognize Your Skills**

Graduate students need to recognize valuable skills acquired during their extensive graduate school experience, such as the analytical skills needed to structure complex data, the communication skills needed to effectively engage a class or share your research and, possibly the most important, the interpersonal and leadership skills needed to work effectively in a team to solve a problem. These are a few features that come free with a Ph.D. Unfortunately, most, if not all, of these attributes are usually forgotten while preparing for a job interview. "All those skills, which are often viewed as soft and irrelevant to the career of a Ph.D., are actually extremely important." Fiske shared.

Your Ph.D. degree will be the reference for your skill set. However, the ability to grow beyond those qualifications will decide your success in any kind of future leadership position. At the same time, institutional support (or lack thereof) for the training of future intellectual leaders cannot be ignored. "I have not seen a single leadership development program ever for [young] scientists in the U.S., and I would love to see somebody innovate in this regard," Fiske says.

Fiske believes students need to take the lead in framing their graduate career in terms of entrepreneurship as opposed to scholarship in order to take more control of their career and give them more options. "Ph.D.-trained scholars possess many of the traits and skills that are of highest value in the 'real world,'" Fiske says. It is advantageous for graduate students—especially Ph.D.s—to view their graduate program as a time of research, teaching, and scholarship where you develop a broad set of skills that can qualify you for any number of career paths. "Actually knowing these options can be beneficial to one's mental health," Fiske adds.

#### Take a Risk

Ph.D.s regularly wonder what is the true breadth of career opportunities afforded them. However, pursuing these options often requires a certain amount of risk, which counters the often well-defined and time-honored career path that an advanced degree affords. "One thing I am concerned about is that graduate students and postdocs are

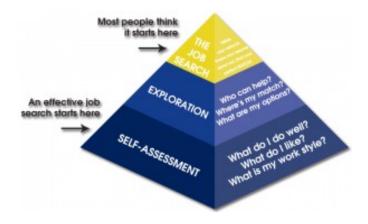
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steeped into what can sometimes be a very conservative intellectual culture, where risk-taking is considered dangerous and frowned upon. The biggest opportunities for myself have come when I have found the courage or foolishness to take a risk." Fiske adds.

Students are usually blinded—and who wouldn't be—by risk adverse career paths that reward hard work and often times convention with grants, tenure, and lifelong security. "And yet risk-taking is exactly what we need [especially] for science and what people need for their professional development," Fiske says.

## **Control Your Career**

It is more important than ever that Ph.D.s continue throughout their graduate career to discover and think about what they like and what they do well. This ongoing "self-assessment" can play a valuable role in a student's ultimate long-term success and happiness. Asking the simplest questions of oneself can have the biggest impact of all. Who am I? What are my interests? What kind of skills do I have? What are my work-related values? What is my work style? These questions can help ensure an informed and affirmative decision when it comes to choosing a career or job. "If you don't like it you probably won't be good at it." Fiske says.



Career Assessment Pyramid

Most young people approach the career pyramid (see Box) upside down—they start with job descriptions in advertisements—instead of starting with themselves and their abilities. Similar to a monument, a career starts with a solid foundation, a perplexing step that is often skipped. Most job searchers begin at the easier step in the process. Students will send 100, or so, résumés or CVs then sit back to see what sticks. However, what typically sticks isn't what you really are or want. Finding a piece of you in the multitude of options offered by [an advanced] degree is key and essential to bringing long-term satisfaction.

Joe Cribari, M.A. (Northwestern 2005) is the grad student advisor at UC San Diego's <u>Career Services Center</u> (CSC). He offers individual career advising appointments and a broad complement of educational seminars and workshops for current masters and doctoral candidates.

Fabian V. Filipp, Ph.D. is a Postdoctoral Fellow of the European Molecular Biology Organization in the Department of Chemistry and Biochemistry at the University of California San Diego, and president of the University of California Council of Postdoctoral Scholars.