

Some thoughts from Dr. Bahram Dahi

1. What skills did you develop in graduate school that have allowed the career trajectory that you have taken?

By far the most important skill that I acquired during my time at UTHSC was to think broadly and out of the box. It is very common for most of us to fall in the cycle of self-validation by always doing what is the most comfortable for us. With the guidance from my advisors, Drs. Gary Keys and Frank DiBianca, I was exposed and subsequently managed to handle situations where a non-trivial solution to the problem was necessary. The type of questions I was asked made me aware of the possibilities, even when focusing on a specific project in the field of Bioluminescence.

In addition, I learned valuable lessons when presenting my research to my committee members on an annual basis. While the goal is for you to go very deep into the subject and push the frontiers, my committee frequently advised me to take a second to think about a question that has been presented to me. It was interesting how much new information one can absorb and later on process if we just listen to those who have gone through the process before us. I learned to respect my audience, even if in fact I knew more in a specific subject at the time.

The best part about Biomedical Engineering curriculum, however, was the fact that we were trained to understand the problems, and specs of a solution by simply learning how to have an effective conversation with non-technical Medical colleagues. While I am not specifically working in Biomedical Engineering at the moment, the methods I used to communicate with people outside of my field have been essential in continuing to be successful at what I do best; engineering.

2. What is one of the skills that you have acquired since graduate school that could have been developed during your doctoral studies?

For people who end up in the industry, there is more to learn than just the deep knowledge of the subject. There are times that one has to understand the dynamics at a company and learn to be pragmatic. Moreover, these dynamics vary significantly depending on the size of the company and core product. Since graduations, I have worked at a biotech startup, a surgical robotics company, a three companies with software applications as their core product. Each one came with its own challenges that I had to learn while on the job.

The graduate school can emphasize more on practicality of a solution for those who are interested in this path.

3. Interpersonal relationships are important for all professions. Is there a strategy that you have found effective for dealing with difficult relationships?

There is one strategy that I believe has helped me throughout these years in the industry: listen to others! Let them finish what they are saying, then accept the criticism or comment without feeling obligated to agree with it. Then at a different time when things have cooled down, try to separate the message from the messenger; is the criticism valid objectively? If so, how can I use this information to become a better person.

4. No doubt you've had to make many career-direction decisions. What advice do you have for someone who might be wavering between choices?

When I was 18 years old, I went with Civil Engineering for my undergrad because it was, believe it or not, the top engineering discipline in my old country. For my Master's degree, I decided to finally follow my heart and entered Computer Science, but I did not know at the time that I would end up switching to something more practical and nuances such as Biomedical Engineering for my PhD. After 10 years of working in the industry, I have seen my career switching directions many times, sometimes without me being fully in control. The fact that currently I work at one of the largest companies in Silicon Valley working on civic integrity solutions on a platform is not something I ever planned in my life, but I could not be happier for being in this situation at this point.

We mostly believe we are in full control of our careers — and some of us may in fact be — however life is unpredictable in the most peculiar way.

My advice for people at crossroads in their careers is to choose the path that they think their contributions could be significant. Keep life interesting by always being in a position where you are learning something new. Don't shy away from opportunities if they don't completely match what you have in mind as your future: you may like the new future better!

5. What was the best career move you made and why?

Having recently graduated from UTHSC with a PhD, I thought a medical device company or a biotech company would be a natural fit for me. I joined a biotech startup as my first job, supporting biology scientists with engineering solutions. However not too long after joining the company, I realized I was not happy at all. After investigating more within myself, I realized the problem was that I never really felt part of the company. The company was focused on finding genes and promoters that would help express those and other well known plant genes for

various environmental situations, making them more resilient to situations such as drought. The mission was noble, but my contribution was not aligned with the core product of the company. I was merely an engineer supporting scientists regardless of how exciting my engineering solutions were.

I left that company for another one where I could work on the core product and I could not be happier, even though the new company was software-based only and in the field of entertainment. I felt useful, and that's a feeling you cannot ignore in the long run.