Pallavi Pallerla

Evan Speice

Independent Study Mentorship

06 November 2017

**Interview Assessment #2**

**Name of Professional:** Bruce Gnade

**Profession/Title:** Executive Director for Engineering Leadership

**Business/Company name:** SMU

**Date of Interview:** 30 October 2017

Going into this interview with Dr. Bruce Gnade, I was unsure of what to expect. I did not have a specific question to ask or have a specific subject to talk about. Dr. Bruce Gnade is the Executive Director of the Hart Center for Engineering Leadership at SMU and had so much information to share with me in the 30 minutes we had a chance to sit down and speak. We focused the conversation over the progression of his years which was different from my last interview. I am extremely grateful for the time he had set aside for me and I had learned how much variety there can be in a career.

The interview started off with Dr. Gnade explaining all the things he has done in his career. His career was full of variety. He worked for Texas Instruments, DARPA, the University of Texas at Dallas, as well as SMU. The diversity amazed because I did not realize how many options you could choose to pursue. He explained to me the difference when working with a company versus working with a school. When working for a company, the company’s focus is to optimize and make more money. When you work as an academic, your main goal is to help students be successful. Dr. Gnade clearly expressed his passion for teaching chemistry. Since Dr. Gnade was very passionate about his academic jobs, I asked him about his research. He currently is working on three different projects at the moment. The one that interested me the most was the research about rotational spectroscopy. The teamwork is apparent in this project which reassured me because that aspect is important to me. At first, I did not know what rotational spectroscopy was but after he explained to me, it seemed like something I would want to do. The spectroscopy is a device being created by chemists to detect an unknown molecule. Each molecule has its own internal frequency. This device would make detection and recognition so much easier and faster for medical professionals. This innovation that the team is working hard to make shows how beneficial it can be to the advancing word. The other research Dr. Gnade is doing is nuclear radiation detection. This device’s potential capability would completely change the world. The device would detect any sort of nuclear radiation and would make the world a much safer place. If this device could prevent a tragic accident like Chernobyl, it would have a great impact. An event like this one has the potential to spark new ideas. While talking about the projects Dr. Gnade is involved in, the importance of taking current problems into consideration to have a greater impact in this world. So far, the passion of the two professionals I have interviewed comes from the making an impact. Making an impact leaves this feeling of satisfaction of being helpful. From here, we went on to talk about colleges. The main issue right now is that there is no chemical engineering program in Dallas. This has caused many people to be unaware of the importance of this career. We talked about how important marketing is for a career since that's is one was to raise awareness. After this, we discussed the personality required to work in a challenging career. The conversation we had motivated me to find a career I am passionate about so the impact I make will be more meaningful. As I progress in my journey, I believe this interview is one I will look back on to guide me.