

August 5, 2005

From Karen Brachot:

Dear Great Neck Breast Cancer Coalition,

I was so honored to spend time in the Ana Soto Laboratory at Tufts and to learn from those top scientists and quality people. I owe this amazing experience to you all, your hard work and creative ideas. I wanted to express my gratitude to you all by explaining how the experience went.

The time I spent at the lab was eye opening. In order to capture the impact of this experience on me without leaving anything out, I will discuss two questions that Ana and Carlos asked me, one on my first day and one on my last.

On my first day they took me into their office and asked me why I wanted to major in Biology. Ana and Carlos are so completely down to earth and not intimidating when you get to know them. But I didn't yet know them so I gave them a condensed version of the answer. I said that my whole life I was an artist and when it came down to making a decision I felt like I could do more important things with science than art. I realized that health was more important than art to me. They didn't exactly understand me, and both are so cultured that they were hesitant and disagreed with what I said. It is very true that you can reach and influence many people with art. This answer that I gave was a product of long hours of discussion and debating. Art had been my passion since I could remember. Science has been a passion in the budding phase for much of my life. It only began to blossom in the end of my 11th grade, a late bloomer. Carlos told me that the typical answer is that people had an uncle who had cancer.

The irony was unbelievable and I hated that I fell into a group of "typical answers." The truth is that the realization I came to, that I could affect more change with biology and research was guided by the experience I had when my uncle was diagnosed with cancer when I was in 11th grade. I was with him for a week in the hospital and I was with him through the chemotherapy treatments. I spoke to his doctors and observed the way they worked. I came out of this with a reinforced thought, that health is more important than practically everything, perhaps with the exception of time. And doctors- I thought were incredibly courageous people. The question that had once been so hard for me to answer became suddenly clear.

On my last day Ana and Carlos asked me, "so what did you learn?"

"What did I learn?" I asked. "Where do I start?" First I learned that an MD is very different from a PHD. They are two separate professions with different preparations and a completely different approach to similar topics. A doctor is trying to cure, and only has the tools that technology and scientists supply him with. A scientist lives a life of uncertainty, always asking questions, and if they are lucky and skilled, on their way to finding answers and even more questions. A scientist can work on preventing a disease all together, which to me seems to be the obviously better way to go about battling a disease. I don't exactly know which path I will take ultimately, but it's such a great thing that I was given this opportunity that opened my eyes to the possibilities that are out there, at such a young age. I came out of this with more questions than I had when I came in, but that is a good thing. I can not even believe the laboratory experience that they let me take part in.

Maricel introduced the experiment to a girl with only theoretical knowledge of science and no real lab experience. She explained the two parts of the experiment to me: the effects of BPA on mammary glands and the bridge linking that with an increased propensity to developing breast cancer. This woman is one of the most modest and intelligent people I have ever met. She really made me feel her passion, and that made me go around and explain the experiment, the effects of harmful chemicals in the environment, and the importance of early detection, to practically anyone who wanted to listen to me. She was eager to answer any question I had, with hands on work and wise words. She planned my experience so well because by the end of it, I had done or had observed every process in the experiment. I worked with the rats, assisted in operations to remove tumors, dissections to remove mammary glands, I learned to process tissue and then embed and stain it. I worked with a PHD student, Laura, on analyzing the mammary glands.

I have to say that this experience was priceless. The people there are all so down to earth and straight forward. Many institutions bend rules, but here everything was done by the rules. They were as kind to the animals as possible and they all genuinely care for the animals. They are relatively unaffected by artificial status symbols. Everyone is open minded to opinions, regardless of who it came from. This can be seen in the most basic interactions. From my first day there, they told me that everyone goes by first name basis.

I have to thank you all so much. I would be interested in helping this program run so that other students can have the same opportunity.

Thank you so much,

Karen Brachot