

Selena Thomas
Sewanhaka High School
Great Neck Breast Cancer Coalition Student Research Internship
University of Massachusetts Amherst, Vandenberg Lab

If there's one thing I took away from my research experience at the University of Massachusetts, it's that science is truly a way of life. After spending weeks in a laboratory from nine to five, afternoons combing through scientific papers, and hours hunched over a microscope, I came to the realization that one has to not only be completely fascinated in their work to endure such a tedious schedule.

Within minutes of meeting Dr. Vandenberg, I was already pleasantly surprised. Requesting that I address her as Laura, she demonstrated right away what a down-to-earth, sociable environment her lab was. She oozed intellect and curiosity for the world around her that I can't even put into words and it was obvious that this mentality was contagious given the enthusiastic dynamic I was getting from everyone else in the lab. Her lab composed of undergraduate, graduate, and PhD students.. Mostly comprised of women, the lab seemed to be an informal but highly productive atmosphere, a combination I would never have expected. The dialogue among Laura and her students ranged from data analysis to exchanging college stories. It surprised me how open and communicative a principle investigator could be while maintaining a level of professionalism and efficiency. Her tendency to answer a question with another question tested everyone in the lab, myself included, to broaden our horizons and consider every logical possibility, something I had never experienced before. In addition, everyone seemed to be involved in each others' work in some way or another. Whether it was aiding in lab procedure or simply giving life advice, assistance was always available

While at the lab, Laura introduced my partner and me to the technical world of science-basic procedures, equipment, data collection, etc. This of course came after our first few days of training, a necessary evil. We sat through hours of lab safety, fire, animal, and online training to assess what we had learned. As I sat through these courses, I was surprised to find I was surrounded by college students going through the same things I was. I couldn't comprehend how fortunate I was to be learning the same things at 16 years old as these college students were doing in their 20s and even 30s. Not to mention, I would be able to witness the data collection from the laboratory mice, which had so carefully been observed and prepared in months worth of protocol design. Within a week, my partner and I were finally able to carry out procedures and take part in all the lab had to offer. We had the opportunity to embed tissue, which would eventually go through a microtome, bag mammary glands, run Hematoxylin and Eosin Staining. And to my pleasant surprise, all of these procedures played a role in the Vandenberg Lab's ongoing experiment. To take part in unprecedented scientific research, let alone have access to a scientific laboratory was an honor in itself.

Soon enough Laura had us analyzing data both from her ongoing experiment and an independent experiment she was kind enough to let us work on. Using a dissection microscope and its compatible software, my partner and I conducted volumetric morphometric analysis to analyze the mammary glands of both rats and mice. A significant percentage having been exposed to a variety of endocrine-disrupting chemicals, the rodents' tissue was analyzed by looking at different endpoints. We sat for hours measuring mammary gland ducts, fat pads,

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lymph nodes, and densities- all which sounded so foreign to us when we first arrived. The tissue samples all looked painfully similar to each other to the human eye. Were we conducting this tedious work, investing hours on end into this research that would yield nothing? We were blindly crossing into uncharted waters. What frightened me more than this was the fact that I couldn't stop. As strange enough as it was, I was addicted. The curiosity of the outcome far outweighed the fear that nothing was on the other end. I had finally understood why everyone in the lab was so passionate about what they do.

Perhaps what made the research more fulfilling was what it ultimately represented. Endocrine-disrupting chemicals, as I learned, are widespread, and unfortunately unavoidable. The effects of exposure, especially at vulnerable points in life (pregnancy, nursing, childhood), can be detrimental resulting in adverse effects and abnormalities. By studying the low-dose effects of these chemicals, we were mimicking human exposure and identifying the potential harmful effects that EDCs pose. Solidifying scientific research allows for legal action to be taken in removing these chemicals from circulation as has been demonstrated in the banning of Bisphenol A (BPA), a well-known endocrine disrupting chemical. After all, environmental health science serves to draw a link between the environment around us and human health. It truly was amazing to know that all the research I was involved in could someday impact the scientific community, and perhaps even legislation.

None of this would have been possible if it weren't for Laura Weinberg, Lisa Levine and everyone at the Great Neck Breast Cancer Coalition. I am so grateful and humbled by the opportunities they have allowed me to partake in. Not only have they allowed me to explore a branch of science that I will continue to study in future, but they have drawn attention to the environmental links to breast cancer, which research has demonstrated, can be overcome. I would also like to thank Laura Vandenberg and everyone at the Vandenberg lab and UMass Amherst for showing me the ropes and truly guiding me through my research experience. Programs like the GNBCC summer research internship are what truly allow my generation and the generations to come to develop a love for science and use it to make a difference in the world. For that, I will forever be grateful.