

# BeAWARE Student Testimonials





# Alyssa Rodriguez

My name is Alyssa Rodriguez and I began my journey with the BE AWARE program during the Spring of my Sophomore year in college. I am currently six months into the program and I have grown tremendously and am continuing to see growth as I gain more knowledge and experience in the lab. Being apart of the research team has taught me to work together with other researchers as well as take on the responsibility it takes to maintain and conduct my own research. My goal after I complete my Bachelors in

Biology is to pursue Graduate school and, hopefully, be able to continue with the BE AWARE program during that process. I have learned so much while being apart of this program and I am excited to continue working in the lab and hopefully do an internship next summer at ARS.



# Maria Aranguren

I arrived at the University of Texas at San Antonio (UTSA) and into its Mechanical Engineering graduate program in 2016. Before becoming a part of the BE AWARE program, I believed to have a lot of knowledge regarding the implementation of engineering and manufacturing techniques in the agricultural and energy production industries. Once I became part of this program, I realized that what I knew was a very small portion of what could be achieved in such an industry. In my personal research, I recognized the great quantity of research involving the improvement and optimization of various agricultural processes. This made me hopeful of the program and of my future at UTSA. As a graduate student, I am constantly concerned regarding my future research and publications. Being part of such a program, lifted the anxiety off my shoulders, as it proved to be a rich area of research with boundless potential.

During the program, I was able to participate in various activities. I have been able to partake in multiple conferences, the first one being the P3 Conference in Washington D.C.; this conference allowed me to present my research alongside my colleagues for the first time in my academic career. This opportunity allowed me to present to multi-million dollar industries and higher education institutions. Since this conference, I have presented in two others: 2018 ASEE-GSW Conference in Austin, TX and 2018 IISE Annual Conference in Orlando, FL. Thanks to this program, I will also be presenting at the 2018 SACNAS Conference in San Antonio, TX in September.

Aside from the conferences and research opportunities in my institution, I was able to attend an ARS internship at the Beltsville Agricultural Research Center in Maryland. The aim of this internship was to introduce students from Hispanic Service Institutions (HSIs) to the research done at agricultural centers and expose them to government level positions in the hopes of encouraging inclusion and diversity. I was honored to be a part of this internship. I met many motivated young individuals, both at the graduate and undergraduate levels. I was also able to work with leading scientists in computer simulations and programming. Through my mentor's help, I built up my knowledge of computer programming, crop growth simulation, and experimental research. This experience also changed my perspective regarding government research positions and institutions. Before this experience, I did not think I could work in these institutions, that being because of my heritage or because of my lack of connections, but now, through this internship, I believe my chances of achieving such positions have increased.

I am appreciative and grateful of all the opportunities offered to me during the BE AWARE program. All of them have improved my skills and opened doors to possibilities in both research and future work opportunities after graduation.



# Brittany Schier

My name is Brittany Schier and I joined the BeAWARE program in the Fall of 2016 at the University of Texas at San Antonio, just after completing my undergraduate education in statistics. My studies were focused on process improvement, project management and social science. Coming from a different field of study, the BeAWARE program guided me into renewable energy and agricultural research. I was excited to enter an area of research with the potential benefit of helping others and the environment.

Our project was focused on finding the optimal growing conditions for algae biofuel through a central composite design including salinity and sucrose. The goal was to decrease the amount of salt and sugar needed to sustain an algae farm. The beginning was intimidating, as I not taken a class in biology since high school or ever worked on a project with students from other universities; the challenge was worth it.

This project provided me the opportunity to visit another university's lab and learn about the algae data collection process. I was able to attend conferences in Washington, DC, Austin, TX and Albuquerque, NM to present our experimental design and findings as well as learn about the renewable energy research conducted at other universities.

The experience I gained from this project has helped me learn how to communicate experimental design and data analysis methods to those outside my field.



# Mauricio Pena

My experience so far here at the USDA located in Maryland it's been great! It's only been four weeks and I cannot believe how much I have learn in this short period of time. Every day I learn about something new, even though I thought I could not learn something new from what I am doing. Thanks to the research I have been doing at UTRGV with Dr. Persans I was a perfect match to what I am doing here.

Working with professionals it is a great experience and it changes my view about how much more I want to study to end up having a job like this. I will definitely not stop studying once I graduate, I will go straight out for my Masters Degree to have a good position at a good place such as here.

I am really thankful to Dr. Persans, who supported my on everything to be able to come here and to give me this opportunity as well as doing research at his lab. It really is a life changing experience and feel more interested on Biology. I hope anyone who is interested at these opportunities have the chance to do research and go to internships since it changes views about everything!!

Now I see what people means when they say "you never stop learning" even when they are experts at what they do. I can't wait to go back and tell my experience to everyone and see if I learn new techniques or such in order to share to see if improvements can be made to the research being done at UTRGV to make it more efficient or better.



# Yazeli E. Cruz Rivera

My name is Yazeli E. Cruz Rivera and I am a former graduate student of the Industrial Engineering program at the University of Puerto Rico – Mayaguez. I joined the BE AWARE program in January of 2016. My past experiences as an industrial engineer were in the aerospace and biopharma industries. I had no experience with agricultural topics prior to joining the program but my main goal was to better understand biosystems through interdisciplinary work with biologists. My efforts consisted of using statistical characterization, representation through statistical modeling, and decision-making through mathematical optimization, all within a biological framework to understand these systems.

BE AWARE provided me the opportunity to pursue an internship at the USDA Beltsville Agricultural Research Center (BARC) during the summer of 2016. During this summer I worked on a case that consisted of defining how hairy vetch management and latitude affect the economics of hairy vetch, Nitrogen supply and corn yield. The results observed for this second case are hairy vetch and corn yield. This case provided the opportunity to use my industrial engineer background to propose my framework in an interdisciplinary field.

This internship provided me the tools to achieve my academic goal of obtaining a masters and also in my new role a technical analyst for Accenture Federal Services. As an analyst with federal clients being exposed previously to a government agency of that magnitude has made easier my transition to the corporate world. I am grateful for the opportunities that this experience has provided me. I highly recommend joining the BE AWARE program.