EWB-USA National Conference Report Erick Serrano, Brianna Morales, Ricardo Rodriguez, Alfredo Garzona



(ABOVE) EWB-UNLV with the Peter J. Boscher award for Dr. Erica Marti, EWB-USA CEO, Cathy Leslie (pictured on the right)

In November of 2019, the Engineers Without Borders student chapter at UNLV (EWB-UNLV) sent students to attend the EWB-USA national conference in Pittsburgh, Pennsylvania. The national conference served as an important time for EWB-UNLV to learn about fundraising, find career opportunities, and connect with professionals and students from across the country. With the help of the College of Engineering, who funded \$2500 towards the travel costs, undergraduates Ricardo Rodriguez, Brianna Morales, Alfredo Garzona and Erick Serrano attended the conference. During the conference, the travel members met with CEO Cathy Leslie, who awarded EWB-UNLV advisor Dr. Erica Marti with the Peter J. Boscher "Outstanding Faculty" award. Additionally, the students heard a keynote address from Boeing's *Human Spaceflight Systems Engineer* Juan Castilleja Jr., and spoke with Senior Civil Engineer and EWB professional Angelita Fasnacht about potential job opportunities. The event lasted only three days, but the EWB-UNLV group gathered a significant amount of information crucial to helping EWB-UNLV thrive. Below are personal experiences and learning outcomes written by each travel member.



(ABOVE) *EWB-UNLV* chapter members before seminars

Ricardo Rodriguez

The Pittsburgh conference was truly an unforgettable experience from all the wonderful people in other student chapters who gave insight and advice on what their chapter does to the sessions that better informed on regulations or feedback to improve our own chapter. On the first day and my first event of the conference, I went to *Clean the World* event where Alfredo and I planted trees along a river nearby the Point State Park. It may have been a relatively simple volunteering event, yet it still allowed us to create stronger bonds with our group and create connections with other student chapters. One of the students from Houston, Tunde, was inspiring in the sense that the reason he is in EWB is to do good for the world. All his intentions lie within helping the environment and those around him. The whole *Clean the World* experience was a great reminder of why our organization does what it does. Not only did it bring a great feeling of accomplishment for helping their community but it enabled Alfredo and I to really get a look of all the other chapters at the conference and see what impressive feats they have done and will do. For relatively new member, it ignites a sense of encouragement and excitement to be a part of UNLV's chapter of EWB.

The conference as a whole was an eye-opener with each talk, session, and event being unique and helpful. The presentation that stuck out the most was by Cal Poly's chapter where they introduced methods on how they get and retain new members in their chapter. They introduced their ideas with what they called a "Crash Course" where it was expected to increase chapter size, increase freshman confidence, and pass on knowledge of more experienced members to newer ones. The basic concept of the "Crash Course" was split into four different meetings with each meeting with varying topics. What they found was that there was the new members learned the project process for EWB and less of a barrier to entry into a project. Considering that their chapter is one of the biggest EWB chapters in the nation, we can take some of their ideas or concepts as a basis to better our own chapter. For example, they recommended us to create an outreach committee in order to get our chapter's name out on

campus and attract more members which involve posters, boothing, and presentations by planning them fairly frequently. Although our chapter already does this, simply creating the committee could create a more unified and cohesive group. Being able to be a part of the chapter and make these changes is motivating as my peers and I will contribute to something that is greater than each of us individually, and it's something that we will do together.



(ABOVE) EWB-UNLV chapter members with EWB-NC A&T and Angelita Fasnacht

Brianna Morales

Not only did Engineers Without Borders provide me with the opportunity to travel to Pittsburgh, Pennsylvania, but I was brought forth the chance to meet a whole conference full of passionate and determined EWB members. The whole trip was very motivational by exciting all its members to return the information to flourish with their own chapter's projects. To begin, I attended a fundraising session where the purpose of the meeting was to help improve funding and provide a different view on aspects of fundraising. For example, a non-profit project can be thought of as an impacting project and appointments should be seen as conversations. In addition, in terms of donors and donations, our members should be seeing these as investors and how these investors want to see an impact in return. The tips brought up in the session greatly informed and inspired our chapter's members to improve funding for EWB and build stronger connections outside of our chapter.

Although the conference had many illuminating talks, the sessions including EWB-Cal Poly were most comforting. Considering that Cal Poly has one of the largest EWB chapters, it felt comforting to receive feedback from current undergraduate members on how they run their organization. To begin, Cal Poly presented with Plumbers Without Borders to speak on their past unsuccessful projects. This brought a sense of reassurance that not all projects will follow

through as desired. If anything, it is important to make the best decision for the current status of the project, even in the appropriate situation of discontinuing a project. In addition, Cal Poly was generous enough to provide a "Crash Course," which they present to their own new members. This session was extremely helpful in terms of increasing member size and improving knowledge of each member. With that being said, my partners and I could not have been more excited to head home and start making an improvement in our chapter, EWB-UNLV.



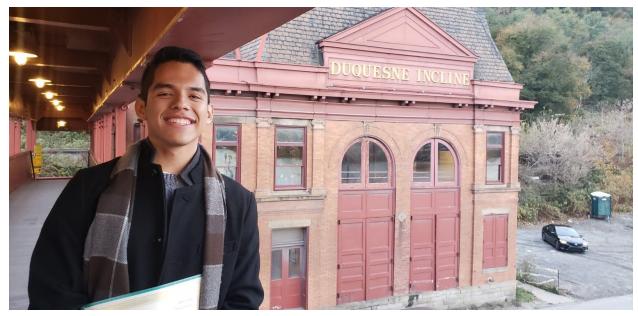
(ABOVE) UNLV student Alfredo Garzona

Alfredo Garzona

My trip to Pittsburgh with EWB-UNLV was a phenomenal opportunity that changed my perception of my ability as an engineer and provided me a clear map of completing a project. Engineers Without Borders introduced me to engineers with a real passion to help people in the way they know best. During the Riverside Clean Up, I met students from North Carolina to Texas to California who all gave me their amazing stories, but Akintunde from the University of Houston, also known as Tunde, left the greatest impact out of all. Tunde explained to me his journey; in Houston, oil seems to be the default, which is difficult since he wants to pursue a career in renewable energy. He did not accept the fact of Texas' oil production and instead went on to create initiatives that pushed the renewable energy agenda forward. Tunde, as many engineers in the program do, saw Engineers Without Borders as the best possible way to leave an impact on both his local community and global community. His story gave me a real model of what I can achieve myself as an engineer and to not place limits on myself and because of him I stopped hoping and began doing.

The presentations initially felt like a formality but soon became an engrossing discussion on the logistics of completing a project and the importance it has on the communities logistically and emotionally. The presentation that laid the base for all the information I would later receive in

the conference was the Guatemala Volcano Fuego Disaster Response. Although I was familiar with the mission of the organization, the presentation gave a detailed rundown on the actual process. Julio Grazioso, a member of the Guatemala board of EWB, explained that during these projects that circumstances are possible to change drastically, but it is important to confront these problems logically and patiently. For example, the project went from needing only one bridge to an increased amount of 6, but with the help of the community and the local government, EWB was able to make great progress. On that note, connections with the community were vital to the project and something I'll keep in mind later on in my endeavors in EWB-UNLV. The trip drove home a sense of direction I needed in order to be the best for my own organization.



(ABOVE) UNLV student Erick Serrano at the Duquesne Incline

Erick Serrano

I was given the opportunity to travel to Pittsburgh and attend the EWB-USA national conference, and as a member of EWB-UNLV for over one year, I had the clear goal of learning fundraising techniques for our organization's benefit. On the first day of the conference, I attended the fundraising breakout session hosted by EWB-USA staff. The EWB-USA staff primarily centered their presentation on attaining the most amount of funding for the least amount of effort. According to them, pursuing a select number of companies in person instead of "cold-calling" them, where an organization sends generic, unimpressionable calls or emails to many businesses, resulted in higher odds of success. This was especially surprising to hear, as our organization was confidently focused on the latter form of seeking funds. Because of this, our organization has narrowed our focus to only the biggest companies in Las Vegas, such as MGM Resorts International, Caesars entertainment, and others.

Towards the end of the conference, our group also had the chance to speak with Angelita Fasnacht, a professional engineer and universal clean water advocate. Prior to meeting with her, we listened to her remarkable story as an engineer in Columbia in an open discussion at the conference; she had previously been kidnapped by local terrorists in an attempt to prevent her from building a safe water network for the community. Only after approximately one month did they release her, forcing her to flee the country and enter the United States. This was incredibly inspiring to hear, so our group was excited to have the chance to speak with her after the speech. After speaking with her, I connected with her for a potential job opportunity with Machine Learning, under the company she currently works with. The experience I had in this trip was beyond anything I had originally expected, and it was important for both EWB-UNLV's progression as well as my own personal growth.



(ABOVE) Students Ricardo Rodriguez and Alfredo Garzona with members of the Texas and North Carolina EWB student chapters

As a result of the College of Engineering's funding, EWB-UNLV was given the opportunity to connect with students as well as professionals from across the country at the EWB-USA national conference. The experiences at the conference have been helpful for both the progress of EWB-UNLV as well as the internal growth of the travel members. Giving the students of UNLV an opportunity to see how an engineer can make a real and immediate impact is an invaluable experience. It is incredibly helpful in motivating members to finish their degrees in STEM, and it creates rapport among the EWB-UNLV members that quickly engulfs other students as well. As a group, the travel team has since worked hard to support EWB-UNLV's international projects, attending and actively participating in the organization's planned events. It is thanks to this conference that the EWB-UNLV organization has grown significantly stronger, and it has proven to be an important event both for the student organization as well as the university in cultivating hard-working and determined students.