Isabella Martinez

IDEA Center’s Spotlight for UC San Diego’s César E. Chávez Celebration Month

Quick Facts
Grade: Class of 2025
Major: Chemical Engineering
Outside Interests: Reading, Art, Health & Wellness, and Spending time with Nature, Family, and Friends

Questions about your experiences:

In April, UC San Diego will be holding the 21st annual César E. Chávez month-long celebration. What has been your experience so far as a Latinx engineering student at UC San Diego?

As a Latinx Jacobs School of Engineering student at UC San Diego, I have felt beyond supported and welcomed by the school and staff. I have chatted with Latinx students and staff, who are proud of their heritage, and encourage Latinx students like myself to embrace our identities. Honestly, I was happily surprised by the amount of Latinx students I saw in my courses, and it was comforting to be surrounded by students with similar upbringings and experiences to myself. I am biracial and have always struggled with my cultural identity, so it has been insightful to meet many other students in the Latinx community who share my biracial identity and struggles. UC San Diego has given me an opportunity to openly explore and solidify my cultural identity in an environment that embraces all cultures and identities.

This past summer you interned at Lawrence Livermore National Laboratory to design a one dimensional hydrogen model. What was the most challenging part about working there and what were your greatest takeaways from the experience?

Interning with Lawrence Livermore National Laboratory over the summer was a life changing experience that I am beyond grateful to have been given the opportunity to pursue. The most...
challenging part about working at Livermore was assimilating to the norms of academia and learning to navigate a research project, especially being the youngest and least experienced intern. Thankfully, I had multiple one-on-one mentors who enhanced my experience and introduced me to the world of academia in the most welcoming way possible. The greatest takeaways I still carry with me from this experience are to use ignorance as a means for conversation and to never be afraid to ask questions and chat with strangers. Knowing that I had the least experience, I used this lack of knowledge as an opportunity to fill in the gaps, and ultimately learned far more than what I thought possible. I engaged in many conversations about textbook material and common practices held in the world of science, as well as conversations where I shared personal anecdotes with my peers and mentors regarding steps we have taken when overcoming obstacles that often face scientists of various historically marginalized communities. Working at Lawrence Livermore heightened my scientific interests and enabled me to pursue my career as a better suited scientist – both technically and holistically.

You also have research experience with a high energy density physics lab at UCSD. Could you tell us a little bit about your research and how you got involved with your lab?

Here at UCSD, I am volunteering in a High Energy Density Physics Lab that focuses on studying thermonuclear fusion as a means to produce sustainable energy. In the lab, I am currently analyzing data obtained from in-house experiments conducted by the brilliant team at work consisting of our PI, postdoc, PhD student, my fellow undergraduate volunteer, and two employees who are former UCSD mechanical and aerospace engineering students. Fun fact, all members on the team are currently women of diverse backgrounds, which has been reassuring and insightful to say the least. Becoming involved with my lab is a full-circle story that is a great example of the power of networking here at UCSD. After connecting with one of my professors here at UCSD, taking any opportunity to chat about the material at hand during office hours and post-lecture discussions, this professor – who I now consider to be a mentor, saw my passion for science and referred me to apply to a meet and greet with a lab coordinator at Lawrence Livermore (LLNL). I got the position as a summer intern with LLNL, who often collaborates with the University of California. I had one brief interaction with my current PI during a presentation I gave about the one dimensional hydrogen model I worked on, and was later reconnected with this professor with the help of my mentors at LLNL. After networking with UCSD professors in one department, I was led to an outside lab that then returned me back to a lab with UCSD!
You are currently Social Chair for the Jacobs Scholars Board. How has being a Jacobs Scholars impacted your college experience and what drove you to pick up your leadership position?

Being a Jacobs Scholar has completely transformed my college experience. Prior to receiving the award, I fully anticipated attending my local community college to fulfill my undergraduate requirements, while saving all that I could to then transfer to a four-year institution. However, receiving the Jacobs School scholarship made attending UC San Diego a life-changing experience. Not only have I been fortunate enough to enjoy the four-year experience, but I have the privilege of being able to be a full-time student and advance my career by fully immersing myself in my education. Moreover, UC San Diego has a student population consisting of equally driven students, which fosters my growth as a student and individual. I decided to take on my position as Social Chair for the Jacobs Scholars Board because I often find myself drawn to a role where I can work with a team to coordinate events and establish an environment that brings our community together. The Jacobs Scholars group is relatively small with the only certain common interest being that we are all engineering students, so, especially after COVID, when my cohort seemed to be more disconnected from each other in comparison to upperclassmen scholars, I decided to take on the role as an attempt to strengthen our JSS family.

As a Latinx engineering student, do you feel supported by UC San Diego Jacobs School of Engineering? What could they do better?

SUC San Diego's Jacobs School of Engineering has made me feel supported as a Latinx engineering student. Based on my interactions with the Jacobs School, there seems to be acknowledgement and recognition of the Latinx community of engineering students through various clubs and programs. Although it is nice to see many other Latinx engineering students, I feel as though the Jacobs School could benefit from hiring more Latinx staff. From my experience so far, I have yet to meet or engage with a Latinx professor. This is problematic because Latinx students like myself are not able to necessarily see ourselves or our cultural identity in our mentors and educators. By hiring more Latinx professors and staff, the Jacobs School will greatly enhance its ability to be a Hispanic-Serving Institution and better serve and inspire its Latinx population.

What advice would you offer current or future undergraduate students from historically minoritized communities?

Advice I would give to current and future undergraduate students from historically minoritized
communities is to embrace their identity, and be proud of their trail-blazing capabilities. Attending an institution with many students who come from various intersections of privileged backgrounds can be intimidating and outcasting at times. However, what I have learned is that there are many students that have more in common with you than you would otherwise think. There are seemingly infinitely many opportunities to meet other students, and you are bound to find others who share your experiences and perspective. You can find solace with these friends, and embark on meeting others who are very different from you, as this challenge can at worst lead to you learning a little bit more about the people around you – who happen to be the kinds of people you may one day be working with. Moreover, I would advise students to take advantage of the resources UCSD has to offer, especially for historically marginalized students. These resources serve students who may otherwise feel outcast because of their identity or community, and the resources are easily accessible and welcoming for members to come out of their shell and incorporate their experiences as part of the UCSD experience.