ALUMNI SPOTLIGHT



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Teach to inspire

Jessica Chacon, Ph.D., strives to be a source of inspiration for her students, the same way her mentors and professors have inspired her.

"My mentors, along with my passion for immunology, mentoring and teaching, guided me into this field and have been a continuous source of inspiration. Their influence, along with the encouragement of friends and family, and my dedication for training and empowering the next generation of physicians and scientists, have shaped my career and fueled my commitment to advancing medical education," Chacon says.

Chacon earned her Master of Science in Biomedical Sciences with a focus in Immunology from the MD Anderson UTHealth Houston Graduate School of Biomedical Sciences in 2009. She subsequently advanced to the school's Immunology Graduate Program, completing her Doctor of Philosophy degree in 2014.

"I was drawn to MD Anderson because of its unparalleled reputation in cancer research and treatment, along with its emphasis on interdisciplinary collaboration and its robust immunology program," Chacon says.

While at the graduate school, Chacon's research focused on identifying ways to improve the expansion, function and phenotype of melanoma tumor-infiltrating lymphocytes (TILs). In collaboration with Moffitt Cancer Center, she published manuscripts and co-invented a novel approach to isolate and expand TILs from cancer patient samples using co-stimulation through the 4-1BB pathway. The technology has since been patented and licensed.

"At MD Anderson, I gained invaluable knowledge and experiences from the Immunology program, particularly under the guidance of my mentor," Chacon says. "Specifically, I learned the value of taking risks and trying new initiatives outside my comfort zone. In addition, I learned the importance of collaboration in driving innovation, and the need to continuously learn and integrate basic science with clinical application to advance patient care."

After earning her Ph.D., Chacon completed a postdoctoral fellowship at The University of Pennsylvania and served as a senior scientist in the pharmaceutical industry before returning to her hometown of El Paso, Texas, and joining the Texas Tech University Health Sciences Center (TTUHSC) in 2019.

In her current role as an assistant professor, Chacon teaches immunology and microbiology to medical students serving both as a course director for Year 1 Scientific Principles of Medicine and a co-course director of the Scholarly Activity and Research Program.

Recently, she created an elective at TTUHSC focused on the fundamentals and clinical applications of cancer immunotherapy. This course provides fourth-year medical students with a comprehensive understanding of cancer immunotherapy principles and mechanisms, preparing students to effectively integrate these concepts into patient care.

Her passion for education extends to her community, too.

During the COVID-19 pandemic, Chacon founded the El Paso – Health Education and Awareness Team (EP-HEAT®). Through this initiative, Chacon works with TTUHSC El Paso graduate and medical students, as well outside student collaborators, to create and disseminate bilingual health education material to underserved communities.

"When the pandemic struck, it magnified the health disparities and challenges faced by our region, and I felt a strong responsibility to contribute meaningfully. I wanted to create a platform that not only addressed these challenges but also empowered students to engage with the community as educators in a bilingual health educational setting," says Chacon. "This dual focus on community engagement and student development inspired the creation of EP-HEAT®, blending my commitment to my hometown with my passion for education, mentoring and public health."

To date, EP-HEAT® has developed bilingual health education materials on various topics including vaccine hesitancy, healthy living, diabetes, COVID-19, digital literacy, and financial health literacy. The team recently publish the bilingual children's activity book "A to Z: A Journey of Health Careers

for Me," introducing young readers to diverse healthcare professions and promoting informed, empowered communities.

As Chacon continues her journey to inspire her students and community, she shares this advice with current and prospective students:

"Cast a wide net, take risks, and be resilient in their research and learning opportunities. By exploring diverse areas, embracing challenges, and persisting through setbacks, they can uncover new passions, gain a broader perspective, and make innovative contributions to the field of medicine and science," Chacon says.

In her free time, Chacon enjoys reading and spending quality time with her family. She and her husband also recently launched Sun City 3D Prints LLC, a 3D-printing company where she serves as the co-founder and chief operating officer.