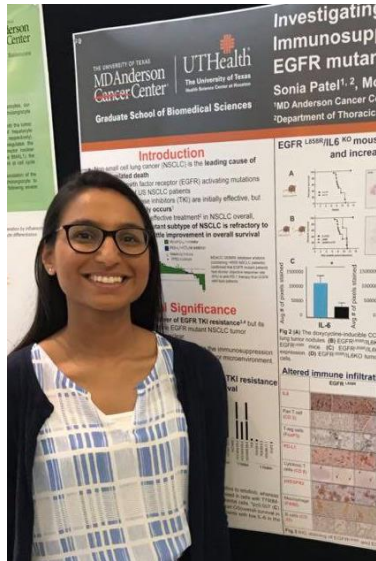


What brought me into STEM!

By: Sonia Patel



I knew I always loved science from my courses in elementary school and middle school but what was extra exciting about learning so many new things is how that shaped my learning outside the classroom too! One example of this is the exploration that came with pursuing fun creative science fair projects. Being able to do little home experiments was such an enjoyable experience. I carried this love for all things science into high school where I had the opportunity to really see how exciting a career in science would be. It wasn't until my first experience at a summer internship in a biomedical research lab that I knew that science was the path for me.

I was awe-struck by all of the cool scientific equipment and innovative experiments going on in this pediatric pulmonary lab. Here I learned basic lab techniques like cell culture, western blot, and immunofluorescence staining while applying it to a project that sought to understand more about the biological processes that drive the deadly disease, pulmonary hypertension. It was interesting to be able to see the disease from everything from a holistic point of view down to visualize what was happening at the protein level. I thank the postdoc, Dr. Nancy Tojais, and the principal investigator, Dr. Marlene Rabinovitch, of the lab for showing me how fascinating the world of novel scientific research is and how to one day build a career in STEM just like theirs.

This led me to continue to pursue my love of research during undergrad in Dr. Margarida Barroso's lab. Here we were working to understand how to better non-invasively detect breast cancer tumors using new form of high-resolution imaging. This new technology could also be used for more precise drug delivery. Today I am a 2nd year PhD student in the cancer biology program here at University of Texas MD Anderson Graduate School of Biomedical Sciences. I am working in Dr. John Heymach's lab to study the applicability of immunotherapy across different types of lung cancer, which happens to be the #1 cause of all cancer related deaths. Our research laboratory works very closely with the clinical team that delivers care to our many MDA patients with lung cancer in efforts to better improve care and understand this very aggressive disease. Through my project I hope to better elucidate the power of the immune system in eliminating these lung cancer tumors.