Abigail Vasquez graduated from Texas A&M University–Corpus Christi in Spring 2025 with a B.S. in Physics and a minor in Mathematics. As an undergraduate, she split her time between coursework, research, and student leadership. Through the Louis Stokes Alliance for Minority Participation (LSAMP), she worked on building a portable muon detector, gaining early experience with instrumentation and data acquisition. She later spent a summer at the University of Nebraska–Lincoln (UNL), working in Dr. Xia Hong's group on quantum materials, with a focus on ferroelectrics. Abigail also held leadership roles in the Society of Physics Students (SPS), serving as vice president in her junior year and president in her senior year. She will begin graduate school at UNL in Fall 2025, where she will complete a year of research rotations but is currently leaning toward rejoining Dr. Hong's lab.

During our conversation, I asked Abigail to expand on both her research and her work in SPS (I am the vice president of my home chapter, so I was especially interested). She described how SPS at TAMU–CC distributed eclipse glasses ahead of the 2024 eclipse, organized student travel to conferences, invited faculty for in-person and Zoom colloquia, ran study sessions for introductory courses, coordinated socials with other STEM clubs, and even arranged faculty dinners to build community. She sees these efforts as more than outreach—they helped students visualize themselves in physics and created networks that later mattered for graduate applications. On the research side, she contrasted hands-on detector building with materials characterization work, noting that moving across subfields gave her clearer criteria for choosing a graduate path. Abigail is keeping two long-range career options open: pursuing academia (with a strong teaching component) or moving into patent law, which she views as a unique extension of physics training.

I came away with a sharper sense of how flexible early physics training can be. Abigail's path shows that hardware (muon detector) and quantum materials (ferroelectrics) are not mutually exclusive; in fact, sampling different research styles can clarify what kinds of questions motivate you. She also highlighted the practical role that structured programs—LSAMP, McNair, and similar cohort-based efforts like our EQUATE program—play in lowering the barrier to research for first-generation and underrepresented students. Abigail described herself as beginner/intermediate in C++ and Python when she entered research environments and built competence by spending time outside the lab reading, practicing, and asking questions. That combination—early exposure, supported entry points, and iterative skill-building—maps directly onto how I am thinking about my development.

Some of Abigail's reflections surprised me. Although she graduated high school with an associate's degree through an early college program, she would not make the same choice again. She also said she would have spent less time in her dorm and more time engaging with her campus community. On the application side, her strongest advice for graduate school was to start organizing materials early and cultivate strong references; the research experiences and conference connections she built through SPS events and program participation were critical. Finally, when I asked about the skills that mattered most, she named listening, curiosity, asking questions, putting in time outside scheduled lab hours, and balancing motivation with knowing when to take breaks.

This interview will directly influence how I approach the remainder of my undergraduate career. As SPS vice president, I plan to adopt several of the activities Abigail described—especially structured study sessions tied to gateway courses, faculty dinners, and collaborative events with other STEM organizations—to strengthen community at my institution.

Her emphasis on relationships and early organization has motivated me to begin assembling materials (CV updates, statement drafts, reference lists) well before my graduate applications are due. I also intend to stay disciplined about asking questions when I hit obstacles in research. Hearing how Abigail balances ambitious goals with practical self-care made graduate school applications feel much more feasible than before.