

**Marlen Castro**

**Alliance/Merck *Ciencia* Scholar Class of 2012**

**Studying bioengineering at the University of California Riverside**

**Interned at the University of California Riverside conducting cancer research**

Marlen came from Mexico to the U.S. when she was 3 years old. Marlen's father was abusive and her parents separated when she was 6. In hindsight, Marlen realized her mother stayed in bad relationships because she didn't feel like she could support herself on her own. With a college degree and a solid career plan, Marlen hopes to not have to depend on anyone else.

As a child, Marlen not only tried to protect her mother from her father, but she was equally protective of her younger brother, who developed a tumor in his upper lip when he was 8 years old. Although the tumor was benign, Marlen's concern for her brother triggered an interest in medicine and, specifically, in helping children. "Kids are so innocent," said Marlen. "They have the right to at least live a little bit. Enjoy their childhood."

As an Alliance/Merck *Ciencia* Scholar, for her summer internships and with the Alliance's support, Marlen has worked alongside a professor in UCR's bioengineering department, where she researched protein interactions involved in a process called SUMOylation. Previous studies of the SUMOylation pathway demonstrated a link to breast cancer and lung cancer; making the pathway a potential drug target for cancer treatment. Marlen's research involves locating the most efficient inhibitor to regulate SUMOylation and hopefully reduce cancer cell growth in the lungs.

As a hospital volunteer in high school, and later as a tour guide on her college campus, Marlen learned that she really likes getting to meet new people. Still, she said, "There's [only] so much a doctor can do if they don't have answers."

Marlen is still deciding between a career as a pediatric cancer researcher and a pediatrician. Whichever choice she makes, Marlen is grateful to have had the opportunity to put her childhood ambition into action.