

75% of undergraduate Cancer Research Awardees go on to graduate and professional schools, and many of the rest go into the biomedical workforce.

# K-State alumna, OB-GYN says student research experience opened doors to success

By Marcia Locke



From delivering babies and performing surgeries to conducting wellness exams and counseling nervous moms-to-be, Kristy Morales, an OB-GYN and a fairly new mom herself, leads a busy life helping people. The 2004 Kansas State University graduate in biology and pre-medicine works in Texas and she credits her undergraduate research experience with helping her become a doctor.

Morales grew up in Manhattan, Kansas. She remembers walking to K-State's Hale Library with her mom, a graduate student at the time, and admiring the beautiful campus with its striking limestone buildings. She loved Manhattan and after graduating from Manhattan High School, she stayed to attend K-State.

That was one of several decisions that set Morales up for success. With thoughts of going into psychology, she also listened to her advisor, Larry Williams, and majored in biology, which would prepare her for medical school in psychology or anything else. She also took the advice of Anita Cortez, then-director of the Developing Scholars Program, to get involved in research, which would help her no matter what she went into.

They were right. Morales loved biology and soon ruled out psychology, added pre-medicine, joined a research team and aimed for medical school.

Kristy Morales

Morales worked in the laboratory of Lorena Passarelli, professor of biology. They studied baculovirus, a virus used in biomedical research as a vector to produce vaccines, diagnostic agents and therapies.

Morales received two Cancer Research Awards from the Johnson Cancer Research Center. The awards provide funding to support faculty-mentored research experiences for students. She investigated a protein complex involved in viral replication, seeking insight that could help optimize baculoviruses as gene therapy vectors for treating cancer and as powerhouses for vaccine development.

"Doing that research gave me experience working as part of a team, critically reading journal articles, and presenting and publishing scientific work," Morales said. "It was a good experience overall. It opened doors for networking and it helped me a lot in med school to have that base of knowledge from the lab."

In fact, during her first year of medical school, her laboratory mates remarked on her exceptional skills.

"They asked me, 'How are you so good at that? You're using those pipettes like a boss!'" Morales said. "I told them I did it in undergrad. I wasn't this good when I first started; I just know how to use the machine."

After earning her medical degree in 2008 from Creighton University School of Medicine in Nebraska, Morales did her medical residency at Saint Louis University Hospital in Missouri and then served four years as an OB/GYN in the U.S. Air Force. Meanwhile, her husband started medical school too. In 2017, his residency took them to Texas.

Now a busy OB-GYN at South Texas Health Systems Women's Corner in Edinburg, Morales looks back with gratitude for the philanthropy that helped her get there.

"The Cancer Research Award from the Johnson Cancer Research Center made it possible for me to finish my research project and continue pursuing my career," Morales said. "Without that support and experience, I don't think I would've been as strong a candidate for medical school."

Things are going well for Morales and her family in Texas. But she will always treasure her time at K-State — in the Division of Biology and the lab — and is grateful for all the doors it opened.

