Leading By Example, Keeping Others Safe

Pail Tubbs | March 30, 2023

Texas Tech’s Cynthia Reinoso Webb provided strength and leadership during the peak of the COVID-19 pandemic.

Every year, March is observed as Women’s History Month. This year, we’re telling the stories of extraordinary women at Texas Tech. They are making history through their research, discoveries, tenacity and scholarship. These Red Raiders not only help us commemorate the past, but they’re blazing a trail toward the future.

It was January 2020 and the world was about to be consumed by COVID-19. Texas Tech University’s Cynthia Reinoso Webb and Steve Presley were at a Laboratory Response Network (LRN) conference in Bandera, Texas. The two scientists at The Institute of Environmental and Human Health (TIEHH) were engrossed in conversations about a new coronavirus popping up in China. The universal thought initially circulating the conference was the virus would be isolated, but several Zoom calls later, the opinions had changed. It would not be a matter of if, but when the virus would arrive in the U.S. and all labs needed to be ready.

The LRN at TIEHH is one of 10 labs in Texas and 140 in the world that work with the Centers for Disease Control and Prevention (CDC) to respond to biological and chemical threats as well as other public health emergencies.

“Oh on the way back, Cynthia said, ‘We’ve got to do this,’” recalled Presley. And so, the LRN at TIEHH would be the first lab to go online and begin the testing using the CDC-approved process that was unique to the LRNs and the CDC.

If there was ever any doubt about how Reinoso Webb planned on helping lead this team into the unknown, it was soon put to rest.

“She leads by example,” doctoral student Bianca Rendon said.

Independent and Outspoken in Ecuador

Ask Reinoso Webb about her childhood goals and dreams, and she will say they were inspired, but nothing like the reality she has experienced.

“I think a lot about this,” she said. “That little girl in Ecuador had no idea where she was going to be.

“I'm living in a completely different county in a completely different culture and a completely different language. I think a lot of the things that happened in my life and the people who raised me and were around me helped me grow to be able to do those things.”

Reinoso Webb comes from a tight-knit family, one she credits with the inspiration to bring a self-sufficient attitude into everything she has experienced.
“Early on, I was incredibly independent, outspoken and strong like my dad would always say,” she said. “The culture I grew up in, doesn’t always encourage women to be strong, independent and outspoken. I don’t know, I guess I didn’t stick to that manual. And that's OK.”

The person who made sure Reinoso Webb knew it was OK to follow her dreams, and maintain the strong, independent spirit she continues to display, is without a doubt her grandmother.

At 30 years old, her grandmother was raising eight children by herself with little more than an elementary-school-level education. Her children all would go on to become productive contributors to their communities.

With tears in her eyes, Reinoso Webb recalled how much she appreciated what her grandmother meant to her.

“She really started the path for everybody else. She's the cornerstone for the whole family,” she said. “She really taught me that it’s OK to be strong. It’s OK to be who you are. It’s OK to find yourself because I'm sure she had to do a lot of that on her own.

“When you come from somebody like that, you can’t afford to be weak. When somebody set that in motion in your family, you can't afford to be less.”

Opportunity at an Early Age
As a 14-year-old, Reinoso Webb would travel nearly 3,000 miles to the U.S. as a foreign exchange student— a substantial journey for a young person on their first trip away from home. It turned out to be eye-opening and awe-inspiring.

“It was unusual because most people are seniors and I was a freshman,” she recalled. “I was really independent. It was a huge adventure.”

The adventure sparked a desire in Reinoso Webb to explore more possibilities. She finished high school in Ecuador and returned stateside to get a bachelor's degree in biology from West Texas A&M University in Canyon. Still not content, she made the decision to pursue even greater opportunities – getting her masters and eventually her doctorate in immunology and infectious diseases from the Texas Tech University Health Sciences Center (TTUHSC). Opportunity once again presented itself while finishing up her degree at TIEHH after starting out as a microbiologist.

“The biological threat coordinator had moved to a different position,” Reinoso Webb said. “It was just one of those things that was meant to be, I think, because this is exactly what I wanted my niche to be.”

She has, through her niche, found fulfillment.

“My position provides everything I need,” she said. “I get to do a little bit of everything. I never do the same thing two days in a row.

Support is key to being successful regardless of career path. Reinoso Webb said she has certainly benefited from working at TIEHH.

“Dr. Presley has been very generous,” she said. “He really believes in me and respects my input and professionalism. It’s allowed me to find my wings and do things I like. He has been there to support me through everything.”

Presley said the feeling is mutual.

“Cynthia is an excellent leader, truly demonstrating a combination of those innate traits that encourage and inspire others to accomplish their tasks for the success of our team,” said Presley.

Calm During the Storm
When the Spanish flu engulfed the globe from 1918 to 1920, an estimated 50 million people died worldwide. That was more than the death tolls of World War I, World War II, the Korean War and the Vietnam War combined. So, when a global pandemic took center stage again in 2020, it was an adjustment for Reinoso Webb and her colleagues.
“We had no idea how to respond. It had been 100 years since previous pandemic,” she said. “There’s no rulebook on how you address things and especially being a CDC LRN lab, we were really the first line of defense.”

Yes, the first line. Reinoso Webb and Presley had reached the decision from the beginning of the coronavirus outbreak that TIEHH would be directly involved.

“I remember early discussions with LRN labs in Texas and they were asking who’s going to be validated and who’s going to be providing the service,” Reinoso Webb said. “We said ‘Lubbock is going to provide the service. I don’t know how, but we’ll do our best.’”

Their best was good enough. TIEHH was the first lab in Texas to be validated and start testing.

“We were drinking from a firehose a lot of times and making daily decisions on how we are going to do things,” Reinoso Webb said. “We had great partners, and the university was amazing and supported us through a lot.”

A calming presence during the chaos is paramount to maintaining order, clarity and consistency. Lives depend on it. Those working with Reinoso Webb had a firsthand opportunity to observe her leadership qualities.

“Most people in her position are office personnel and spend almost no time in the lab,” Rendon said. “During the pandemic, Cynthia was in the lab, managed all her other duties and was here just as much if not more than any other person.”

To read more on Rendon’s involvement with Reinoso Webb in the COVID-19 testing, follow this link: [https://today.ttu.edu/posts/2022/07/Stories-COVID-19-Testing-Changes-Trajectory-for-Doctoral-Student](https://today.ttu.edu/posts/2022/07/Stories-COVID-19-Testing-Changes-Trajectory-for-Doctoral-Student)

Prior to COVID-19, a Biosafety Level (BSL) 3 lab that may do 400 tests per year was now pushed to do hundreds per day. The lab persisted, fighting through long hours, a lack of sleep and even a fire in the facility. even did so despite a multitude of obstacles from long hours and a lack of sleep to a fire in the facility. Reinoso Webb was at the center of it all, helping the lab personnel keep their composure.

“Cynthia’s professional expertise, work ethic, persistent resolve and sincere dedication to doing whatever was necessary to get the Texas Tech COVID-19 Testing Team functional and online were essential to reaching our goal,” said Presley.

“As a smaller lab we always stuck to a 24-hour turn-around time because Cynthia never wanted a person or family having to wait for results,” Rendon added. “She always strived for us to inform results as fast as possible so people could have an answer and not have to worry.”

Moms Lead

“Sacrifice” can be a word carelessly used at times. However, it is the absolute best way to describe how Reinoso Webb applies herself. As a mother of two, many sacrifices had to be made for her to do what she does.

“We pretty much lived at the lab,” she said. “It was personally difficult because my daughter was 6 months old when the pandemic started and I had a 3-year-old. But my husband really helped out by taking on additional responsibilities. It allowed me to be able to be here. That way when I’m here, I’m completely focused on what our mission was at the time.”

Throughout this Women Making History series, one key takeaway is the level of determination each woman exhibits and their innate ability to compartmentalize, prioritize and strategize. Part of the process for Reinoso Webb is self-reflection.

“I think I had to be honest with myself and understand I wasn't going to be able to do everything,” she said. “I wasn't going to be able to attend all the school events. I wasn't going to be able to get my daughter dressed every morning. I can't do it all, so whatever I can do, I'm going to be the best at it with my children.

“I couldn't allow myself to feel guilty about not being there 24/7; I just had to do the best I could with what I had at the moment. The time that I'm at work, I'm going
to be devoted to work. In the time I'm home, I'm going to be devoted to home. I think it's a struggle every woman goes through, whether there's a pandemic or not.”

Her devotion to both family and career did not go unnoticed by her colleagues or those whom Reinoso Webb has mentored.

“Outside the lab, she is always there for any of us no matter the issue,” Rendon said. “I can ask about anything – related to the lab or personal – and she has always given me sound advice. I have looked up to her in many ways throughout the entire process.”

“I have found her sincere empathy and compassion toward other people, particularly in stressful situations, to be one of her strongest leadership traits,” Presley added. “I admire Cynthia's innate work ethic and devotion to doing whatever is necessary to accomplish her mission, particularly relative to public health. Her compassionate approach when addressing and resolving intrateam conflicts or stress and anxiety issues occurring in individuals has helped me to be more effective as a leader.”

Maintaining the Dream
As Reinoso Webb reflects on her time at Texas Tech and TIEHH, she can't help but be inspired about what lies in front of her – the passion she has for her job, students, colleagues and, most importantly, her family.

She sees the good work TIEHH has been able to achieve, especially in the face of a global pandemic.

Reinoso Webb also has great perspective, which is what ultimately makes her fitting of the “Women Making History” moniker.

“A lot of people talk about the American dream and reviving the American dream,” she said. “It's there. It's at your fingertips. It's just the amount of work somebody is willing to put in. You can really be whoever you want to be if you're willing to put in the work. I refuse to think that I'm entitled to anything besides what I've worked for.”