Latinxs and Hispanics in Mathematical Sciences



"We can make the world better by staying in school and never giving up. There are many educational and financial opportunities for students, so don't give up because of lack of resources."

Sara del Valle

Sara Del Valle was born in Mexico and moved to the U.S. at the age of 16. As a child, she always loved school and fell in love with mathematics when she was introduced to algebra. Looking around on the Web for a Research Experience for Undergraduates (REU) program during her senior year at the New Jersey Institute of Technology (NJIT), she came across the Mathematical and Theoretical Biology Institute (MTBI). Established by Carlos Castillo-Chavez at Cornell and now at Arizona State University, MTBI has been providing summer research opportunities for students since 1996. This REU program exposed her to mathematical epidemiology, which became her career path. With both a bachelor's and a master's degree from NJIT, she enrolled in the Ph.D. program at the University of Iowa, with a fellowship from the Graduate Assistance in Areas of National Need program of the U.S. Department of Education and a second fellowship, from the Sloan Foundation. While in graduate school, she moved to Los Alamos National Laboratory (LANL) to continue working on her thesis there. After receiving her Ph.D. from Iowa, she joined LANL in a post-doctoral position and has now been working at LANL for over 13 years.

Sara Del Valle is an applied mathematician who works on mathematical and computational models for infectious diseases. The main thrusts of her research are to improve the understanding of human behavior and their impact on disease spread as well as to develop disease-forecasting systems. She has developed mathematical and computational models to understand the impact of infectious diseases such as HIV, smallpox, influenza, malaria, and most recently Ebola and Zika. She is also one of the pioneers in investigating the role of Internet systems on monitoring and forecasting disease spread. Her goal is to develop a disease forecasting system using open data and open source code.

Lathisms was founded in 2016 in order to showcase the contributions of Latinx and Hispanic mathematicians during Hispanic Heritage Month, which is celebrated in the United States from September 15 and October 15 every year. During this time, we feature/reveal a prominent Latinx/Hispanic mathematician daily. See all the featured mathematical scientists at LATHISMS.ORG.

Thanks to the American Mathematical Society and the Mathematical Association of America for support of Lathisms.