

Latinxs and Hispanics in Mathematical Sciences



Omayra Y. Ortega

Omayra Y. Ortega is an assistant professor of mathematics & statistics at Sonoma State University in Sonoma County, California, and the newsletter editor for the National Association of Mathematicians (NAM). She held her first teaching position at Arizona State University, where she worked for nine years and was recognized with many teaching and mentoring awards including the ASU Centennial Professor Award in 2012. She later held a visiting position at Pomona College, her alma mater, before landing her current position at Sonoma State. Ortega is originally from Far Rockaway, Queens, New York, and has lived and worked all over the world including Boston, Massachusetts; Los Angeles, California; Cairo, Egypt; Iowa City, Iowa; Dublin, Ireland; and Phoenix, Arizona. She earned her Ph.D. (2008) and an M.S. (2005) in applied mathematics and computational sciences from the University of Iowa, where she also was awarded her Masters of Public Health. She earned a B.A. in music performance and B.A. in pure mathematics from Pomona College in 2001. Her scholarly interests reflect her expertise in mathematics: mathematical and computational biology, mathematical epidemiology in developing countries, infectious disease epidemiology, and the participation of women and minorities in sciences. Regarding the latter, she has organized an annual Sonia Kovalesky High School Mathematics Day at several institutions including the University of Iowa, Arizona State University, and Pomona College in recognition of the day's namesake, who was the first woman to receive a Ph.D. in mathematics.

Ortega's research in mathematical epidemiology is solidly grounded in the public health problems of our world. Using mathematical modeling and the theoretical core of mathematics as tools, she is able to better understand and describe emergent health problems such as HIV, HPV, rotavirus, malaria, polio, and TB. Ortega collaborated with the Irish Ministry of Health on a study to quantify the number of Irish children living with guardians who are drug and/or alcohol abusers, and with the Egyptian Ministry of Health to determine the efficacy of the Rotavirus Vaccine on the Egyptian public. Ortega's contributions to science and society improve the health community's understanding of infectious diseases and inform policy makers on how these diseases can best be controlled at the population level.

"For me, Hispanic Heritage Month is a time to remember the cultures that have sustained and nourished us along our way. I look forward to this time of year to give thanks to my Panamanian heritage, full of reggeaton, sancocho (soup), tortillas and tamales (every country has a different way of making these), molas, and family! I am especially thankful for my grandmother, Carmen Duesbury, the matriarch of my family. We all inherited her legacy of stubborn determination, fiscal responsibility, and family celebrations!"

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.

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