

Latinxs and Hispanics in the Mathematical Sciences



Joan Ponce

Postdoctoral Scholar, Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles

Joan Ponce was born in Gainesville, FL, and grew up in Quito, Ecuador. She attended Escuela Politécnica Nacional del Ecuador before transferring to the University of Florida and completing her bachelor's degree in Mathematics. Joan completed her Ph.D. at Purdue University in 2020 under Zhi-lan Feng and was partially funded by the NSF Graduate research fellowship program. She is currently completing her second year as a postdoctoral scholar at The Semel Institute for Neuroscience and Human Behavior, working with Sally Blower on geospatial modeling of access to healthcare. In January 2023, she will start a position as a Presidential Postdoctoral fellow at Arizona State University.

Joan uses mathematical models to describe and better predict the evolution of disease dynamics. She has developed mathematical and computational models to understand the dynamics of infectious diseases such as avian influenza, Ebola, malaria, COVID-19, and, more recently, HIV. Her current research focuses on modeling geographic accessibility to antiretroviral treatment using geographic information systems and georeferenced HIV case data.

Joan became involved with the Association of Women in Mathematics (AWM) as a mentor for incoming graduate students from underrepresented groups in graduate school. Throughout graduate school and her postdoc, she has worked closely with the National Alliance for Doctoral Studies in the Mathematical Sciences.

Joan advises students, "A research career can be pretty challenging. However, having a sense of belonging to a community and being supported by your peers makes any experience personally and scientifically enriching." She believes achieving the goal of an academic career as a research professor takes both personal effort and assistance from collaborators in your research network. She encourages students to try and participate in conferences, research groups, and internships to widen their professional networks.

"Hispanic Heritage Month is an opportunity to celebrate our community's efforts to enhance diversity, equity, and inclusion in mathematics and highlight the contributions of Hispanic researchers to the scientific community. By increasing the visibility of underrepresented groups in science and their accomplishments, we can help motivate new generations of Hispanic mathematicians."

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](https://lathisms.org).

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