

SIUE's Martinez Honored With Hoppe Research Professor Award

February 3 2021 9:00 AM



EDWARDSVILLE - The Southern Illinois University Edwardsville Graduate School has presented its 2021-23 [Hoppe Research Professor Award](#) to Adriana E. Martinez, PhD, associate professor in the College of Arts and Sciences' (CAS) Department of Geography and Geographic Information Sciences and Department of Environmental Sciences.

The Hoppe Research Professor Award recognizes and supports SIUE faculty members whose research or creative activities have the promise of making significant

contributions to their field of study. The award supports a significant portion of a faculty member's larger research agenda for a two-year period. Recipients are expected to produce published scholarly works and externally sponsored funding.

The award will support Martinez's project, entitled "The Hydrological Impacts of the U.S.-Mexico Border Fence along the Rio Grande River, Texas." The comprehensive study will examine the hydrological impacts of the 2008 U.S.-Mexico border fence on local residents by calculating flood flows and boundary conditions, modeling changing flood extents for multiple flood scenarios, and determining pre- and post-fence conditions to determine how the fence has impacted flooding.

"I feel honored and privileged that this work is being recognized through the Hoppe Research Professor Award," said Martinez. "The impact of the border fence is not only important to the Texas-Mexico area, an underserved region, but also is a national issue that merits investigation. This funding will provide the opportunity to examine a topic that has not been previously studied despite the impact fence construction has had on habitats, landowners and potential flooding."

In 2008, as Martinez left her hometown of Eagle Pass, Texas, to earn a doctorate in river science, construction had just begun on the border fence. Like many local residents, she did not believe the fence was the answer to growing border concerns and grew worried about the significant environmental impact construction would have on the Rio Grande River.

"The project began with a course on human migration, where I conducted interviews with residents to determine how locals felt about the fence, and its impact on undocumented immigration and international relationships," said Martinez. "Now, I finally have the time to examine the impacts of the fence on the Rio Grande and the river processes that may be altered there, which is my primary area of expertise."

"This project addresses a timely and important issue of the effects of border wall construction on flooding," said CAS Dean Kevin Leonard, PhD. "It has implications that extend beyond the disciplines of geography and environmental sciences, and has relevance to social sciences, ecosystem management and policy."

"Dr. Martinez's scholarly work and professional reputation are significant and unique," added Wendy Shaw, PhD, chair of the Department of Geography and Geographic Information Sciences. "The Hoppe Research Professor Award will not only have a significant impact on her ongoing border wall project, but will also enhance the reputation of SIUE and the College of Arts and Sciences."

In the near future, Martinez and her collaborators plan to apply for external funding to further examine how such populations are affected. Future project plans include notifying residents about the flooding impacts, examining census data to see which populations may be affected, and analyzing hospital discharge data to determine if floods and fence lines have impacted health along the border.

A loan fund was established in 1976 through the SIUE Foundation by Joseph W. Hoppe, because he believed in SIUE's mission and the value of faculty research. Four years later, the Hoppe endowment became the basis for the Hoppe Research Faculty Award. In 1999, the award was transformed with the help of SIUE academic deans into the current Hoppe Research Professor Award program.