Cristina Villalobos

Cristina Villalobos is Full Professor and Ad Interim Director of the School of Mathematical and Statistical Sciences at the University of Texas Rio Grande Valley and Founding Director of the Center of Excellence in STEM Education (C-STEM), which focuses on strengthening STEM academic programs and providing resources for the academic and professional development of students and faculty. Villalobos' research area is in optimization, optimal control, and modelling. Her current work with collaborators involves modelling the treatment of the eye disease retinitis pigmentosa. Villalobos' is also very active in STEM curricula reform and STEM initiatives, working closely with campus programs, STEM faculty, and K-12 programs to better address the needs of students. She has acquired over $6M in grants in STEM Education.

As a Director of the Center of Excellence in STEM Education, Dr. Villalobos leads efforts to incorporate Challenge-Based Instruction (CBI) into STEM curriculum, faculty professional development in CBI, and the development of a fourth-year CBI curriculum for the Texas Pre-Freshmen Engineering (TexPREP) program, a middle- and high-school student outreach activity. Additionally, she leads efforts to involve undergraduate students in research activities and provides them with resources for the academic, career, and professional development to prepare them for graduate studies. More information on the center and its resources can be found at www.utrgv.edu/cstem.

In addition, she has been recognized at the national level for student mentoring and STEM leadership with the 2013 Distinguished Undergraduate Institution Mentor Award from the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) and a 2012 HENAAC Luminary Award from the Great Minds in STEM. She is also a recipient of the 2013 University of Texas Regents' Outstanding Teaching Award and recently received the 2016 American Association of Hispanics in Higher Education Service/Teaching Award. She currently serves as Chair of the Selection Committee for the Gweneth Humphreys Award from the MAA and is on a three-year appointment on the Board of Directors with SACNAS. She has served in other leadership roles with the SIAM Diversity Committee, the SIAM Workshop Celebrating Diversity, Richard Tapia Celebration of Diversity in Computing Conference, the Infinite Possibilities Conference, and the Blackwell-Tapia Conference. Villalobos was born and raised in the Rio Grande Valley of Texas and received her Bachelor's degree in Mathematics from the University of Texas-Austin and her Ph.D. in Computational and Applied Mathematics from Rice University in 2000. She is a Ford Foundation 1994-1997 Predoctoral Fellow.