

U.S. National Science Foundation Award No. 2434130 Award No. 2112650



Center for Multidisciplinary Research Excellence in Cyber-Physical Infrastructure Systems (MECIS)

Dear NSF CREST/HBCU-RISE/PRP Program Attendees,

On behalf of the NSF CREST Center for Multidisciplinary Research Excellence in Cyber-Physical Infrastructure Systems (MECIS) and The University of Texas Rio Grande Valley (UTRGV), it is my pleasure to welcome you to the Inaugural NSF CREST/HBCU-RISE/PRP PI Meeting. We are honored to host this gathering of professionals, researchers, educators, and students.

Having a venue that is dedicated to the NSF CREST/HBCU-RISE/PRP Programs where principal investigators, directors, faculty, administrators, staff, and students can meet and discuss relevant topics and issues, share best practices, and network is essential to the success and sustainability of these impactful programs. With this in mind, a three-year pilot conference grant has been awarded by NSF to bring together NSF Program Officers and Staff who manage these programs with the university personnel who are running these programs at their institutions. UTRGV is hosting the inaugural meeting of this series, with California State University San Bernardino and California State University Los Angeles set to co-host the 2025 meeting, and University of District of Columbia set to host the 2026 meeting.

At UTRGV, our commitment to transforming the Rio Grande Valley through innovative and accessible education is reflected in our rapid growth and achievements. As a Carnegie R2 research university, we are proud of our advancements in research, community engagement, and student success. Our recent accomplishments, such as being ranked the #1 university in Texas for the second consecutive year according to Washington Monthly, the #1 university in Texas for lowest student debt upon graduation, and the #3 fastest-growing doctoral public institution in the nation, demonstrate our dedication to excellence and accessibility in higher education.

As a Carnegie Community Engaged institution, a key part of our mission is to serve our communities by facilitating access to higher education for the many historically underserved and socioeconomically disadvantaged students in the Rio Grande Valley. This commitment is reflected in our student population, which is 91% Hispanic, 94% from the region, 45% first generation, and 63% Pell grant recipients. These demographics are further supported by UTRGV's student success metrics, which include a student persistence rate of 79% for first-time, full-time degree-seeking students; over 95% course completion at lower, upper, and graduate levels, and a 6-year graduation rate of 47% for first-time, full-time undergraduates. Reflecting our mission, UTRGV has seen great growth, breaking records in degrees awarded in 2022-2023, the most in our school history with 7,146. Moreover, UTRGV is now the ninth-largest university in Texas with a fall enrollment of more than 34,000 students in 2024.









The University of Texas Rio Grande Valley / 1201 West University Drive / Engineering Portable EPOB13 1.109 / Edinburg, Texas 78539-2999 Phone: +1 (956) 665-3070 / mecis@utrgv.edu / https://www.utrgv.edu/mecis



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Additionally, our research enterprise has quadrupled to \$86.9 million over the past nine years, positioning UTRGV as a hub of innovation and discovery. This growth reflects our ongoing commitment to expanding our research portfolio and laying a solid foundation for achieving R1 and Emerging Research University Status in the very near future.

NSF CREST MECIS is dedicated to achieving research excellence in cyber-physical infrastructure systems by integrating sensor technologies, autonomy, and artificial intelligence. This mission is achieved through cutting-edge research, education, workforce development, technology transfer, and community engagement efforts. The center supports two newly established doctoral programs in Material Science and Engineering and Computer Science with Interdisciplinary Applications, thus, affording students at UTRGV the opportunity to pursue their doctoral degrees in engineering and computer science right at home.

We are pleased to host this year's meeting, which promises to be a dynamic and valuable experience. We aim to provide an environment conducive to meaningful discussions, networking, and collaboration. We extend our gratitude to our research partners, sponsors, and all attendees for their continued support and participation. We look forward to a productive and inspiring gathering in a relaxing atmosphere.

Finally, I would like to take this opportunity to thank my co-PIs on this grant (Kimberley Cousins, Pawan Tyagi, Arturo Pacheco-Vega, and Maria Tamargo), my wonderful team, Gabriela Cantu, Manuela Cantu, and Carlos Pena-Caballero, our Office of Research Communications team, Maria Gonzalez and Jesus Alferez, our esteemed external evaluators, Jorja Kimball and Margaret Hobson, and our NSF Program Officers, Luis Cubano, Tomasz Durakiewicz, and Regina Sievert. This event would not have been possible without the outstanding dedication and commitment of this wonderful group of professionals.

Bienvenidos and Welcome,

Constantine Tarawneh NSF CREST MECIS Director











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