



# SPCEET RESEARCH SEMINAR SERIES

## Dr. David Claudio

David Claudio (he/him), PhD, PE, CPIM, is an associate professor and director of the Industrial Engineering program at the Department of Mechanical and Industrial Engineering at UMass Lowell. Prior to joining UMass Lowell, he spent eleven years at Montana State University (2011-2021). He holds a B.S. in Industrial Engineering from the University of Puerto Rico, Mayagüez, an M.S. in Industrial Engineering from Rensselaer Polytechnic Institute, and a Ph.D. from Penn State.

Dr. Claudio's research bridges the gap between healthcare and engineering by advocating for participatory, interdisciplinary problem-solving approaches to enhance quality management and reduce safety risks in clinical environments. His work integrates human factors and modeling techniques to tackle real-world healthcare challenges from a systematic perspective.

As a Hispanic STEM professional, Dr. Claudio's experiences have fostered a deep empathy for individuals from underrepresented groups who face systemic barriers in accessing services. He is a fellow with the Robert Wood Johnson Interdisciplinary Research Leaders program, where his team explores systemic racism and its impact on Latino women's health in Gallatin County, Montana.

## Navigating the Patient Experience: A Journey from Improving Processes to Finding Ways to Advance Social Justice

In this talk, Dr. Claudio will present his evolving research journey in healthcare. Initially focused on applying Industrial Engineering (IE) tools to streamline healthcare systems, his work has grown to integrate human factors and modeling techniques, addressing real-world problems from a systems perspective. Over time, Dr. Claudio's focus shifted from an operations-centric approach to a patient-centered one, which led him to explore critical issues such as mental health for underrepresented populations.

Collaborating with an interdisciplinary team, Dr. Claudio transitioned from clinical-level work to a broader focus on public health. Today, he leverages his IE expertise to challenge systemic racism in healthcare and address policy limitations. Dr. Claudio's work emphasizes creating more inclusive approaches that balance efficiency with equity while integrating humanitarian concerns.

Dr. Claudio will also highlight the importance of interdisciplinary collaboration, not only between professionals but also with the community. Drawing on over six years of experience with Community-Based Participatory Research (CBPR), he will discuss how earning the community's trust and involving them as co-researchers is key to achieving true integration of research, outreach, and teaching.

**Date:**

**Wednesday, November 6th**

**Time:**

**11:15AM - 12:15 PM**

**Location:**

**Q-109**