Technology and innovation were featured prominently in President Barack Obama’s State of the Union address last month when he stated: “I want Americans to win the race for the kinds of discoveries that unleash new jobs—converting sunlight into liquid fuel, creating revolutionary prosthetics . . . pushing out into the solar system not just to visit, but to stay.” This vision is not new and has guided efforts by public and private foundations for many years. These foundations rely heavily on evidence produced by various studies and interventions to guide their decisions about how to speed our technological race to the top. One key strategy is developing and improving the labor force in the science, technology, engineering, and mathematics (STEM) fields.

This talk describes efforts to develop, diversify and better prepare the STEM workforce. Cosentino will use concrete examples to illustrate how rigorous research can produce persuasive evidence—both formative and summative—to inform decision making. She will draw on her research, which includes studies of the factors associated with the representation and success of women and transfer students in engineering, the impact of scholarships and fellowships on student achievement in STEM fields, and efforts to build capacity at colleges and universities throughout the nation to deliver a 21st century STEM education.

Dr. Clemencia Cosentino (Ph.D., sociology, Princeton University), born and raised in Argentina, is a senior researcher and STEM area leader at Mathematica Policy Research, is the former director of the Program for Evaluation and Equity Research at the Urban Institute. Cosentino specializes in large-scale studies of efforts to improve the participation of underrepresented groups in education and the scientific workforce. Findings from her work have provided evidence of effectiveness as well as formative feedback to guide decision making at public and private foundations, including the National Science Foundation (NSF) and the Lumina Foundation for Education.

Save the date for IEEI Distinguished Lectures this semester:

Jackie Sullivan, Ph.D.
February 26th 1:30-3:00 pm

Norman Fortenberry, Ph.D.
March 24th 12:00-1:00 p.m.