

Manuela Ayee elected new CACHE Trustee



Dr. Manuela A.A. Ayee serves as an Associate Professor of Chemical Engineering at Dordt University, a primarily undergraduate institution in Northwest Iowa. She obtained her baccalaureate at Dordt and earned her master's and Ph.D. degrees in Chemical Engineering from Iowa State University and the University of Illinois at Chicago (UIC), respectively. After completing an NIH Pulmonary and Critical Care Postdoctoral Fellowship in the Department of Medicine at UIC, she began her position at Dordt University in 2018. Her research interests involve the use of both computational and experimental methods to elucidate the molecular mechanisms underlying cell membrane biomechanical modulation in pathophysiological contexts.

In addition to research and teaching, she has a significant interest in supporting students from traditionally underrepresented groups in STEM by facilitating initiatives to ensure their academic success. Consequently, she actively works to foster an educational environment where the recruitment and retention of academically talented students from traditionally underrepresented groups, first generation, and lower income communities is prioritized. One such initiative is the NSF-funded "RU-STEM Scholars Program", administered by Dr. Ayee (PI), which awards annual tuition scholarships and uses evidence-based practices to foster academic success and build STEM identity among cohorts of scholars. She also serves as the faculty sponsor of the Women in Science and Engineering club on campus, on the Graduate Studies Committee, and the Institutional Review Board. Most recently, Dr. Ayee began a term as the Chair of the Minority Affairs Committee at the American Institute of Chemical Engineers (AIChE).