The goal of Georgia Tech’s “Physiology Laboratory Experiences for Applied Science Education (PLEASE): “Engaging African American Males in Science and Mathematics: is a project partnership with Fulton Leadership Academy (FLA) to provide 6th – 12th grade science and mathematics teachers with intensive and follow-up professional learning sessions designed to enhance and deepen pedagogical content knowledge in the Mathematics Georgia Standards of Excellence and newly adopted Science Georgia Standards of Excellence through the use of problem-based learning and reality pedagogy. All science and mathematics teachers at FLA will participate in a 1-week, 30 hour workshop in the summer of 2017 on the campus of Georgia Tech, and three 3-hour follow-up professional development learning sessions during the 2017-2018 school year. Through this collaborative partnership, participating teachers will deepen their content knowledge of systems physiology, pedagogical skills, and teaching practices to increase student success in the Science and Mathematics Georgia Standards of Excellence.