Geoscience Educational Opportunities & Career Oriented Research Experiences

Sean Tvelia, Marianne McNamara, Scott Mandia, Darryl Butkos - Marine Science, Suffolk County Community College

Geoscience Educational Opportunities & Career Oriented Research Experiences (GEO CORE) is an NSF-sponsored collaboration between Suffolk County Community College, Stony Brook University, the National Oceanic & Atmospheric Administration, and the U.S. Geological Survey’s Water Resources Division to provide pathways for students from high school to college and into geoscience careers as well as to provide professional development activities to in-service teachers.

The goals of this Geopaths Extra program are to 1) increase diversity and participation within geoscience programs, 2) increase student success and retention in geoscience courses, and 3) provide pathways to four-year institutions and regional career opportunities. In order to achieve these goals we have established the GEO CORE Summer Institute, the GEO CORE Ambassador program, and a series of career-oriented research experiences for students and faculty.

The GEO CORE Summer Institute is a four-week program where participants work with program staff and scientists from cooperating agencies to study firsthand the environmental issues being addressed by geologists, marine scientists, and atmospheric scientists across Long Island. During each week of the program, participants visit specific field sites where they learn correct observational and sampling techniques and explore how human activity affects our environment. Secondary educators accepted into the program receive a $1000.00 stipend and work with program staff to develop place-based activities to be used within their classes and shared on the program website.

The GEO CORE Ambassador program is faculty/peer mentoring program. Each year a group of nine geoscience students are selected to serve as GEO CORE Ambassadors. Ambassadors serve as peer mentors within geoscience classrooms where they serve as tutors working directly with students in laboratory settings.

Finally each month students and faculty are invited to take part in full-day Career-Oriented Research Experiences. During these full-day workshops participants learn about sample and data acquisition, data analysis, and data visualization while working on contemporary issues that affect our communities.