Abigail Martens, University of South Florida, Tampa, FL, for her project: *Pre-eruptive crystallization conditions in the past 25 Ma at Martinique Island as revealed by textural and chemical variation in phenocrysts*

Abigail Martens is a Ph.D. candidate at the University of South Florida (USF), with Dr. Aurelie Germa, focusing on spatial and temporal evolution of the magmatic processes on Martinique Island, Lesser Antilles, combining petrography, geochemistry, geothermobarometry, geochronology, physical volcanology, and stratigraphy.

Prior to her time at USF, she received an BS from Illinois State University. She was able to develop various research and lab skills at this stage in her career. While in undergrad, she also received an amazing opportunity to work at Lamont Doherty Earth Observatory in New York City through an REU program. She performed research in the field and lab to find the time and age progression of the Yellowstone hotspot track using paleomagnetism and radiometric dating. Abigail presented her REU research at the annual GSA conference in 2015. She then took a master's position California State University and was awarded a graduate research fellowship through the NSF Centers for Research Excellence in Science and Technology. Her thesis work determined the structural and strain analysis on Obsidian Dome and surficial structure interpretations of Inyo Volcanic Chain. In addition, she gained LiDAR data on the entire Inyo volcanic chain in Eastern California from another NSF grant, The National Center for Airborne Laser Mapping. In her free time, she is a part of a salsa performance team, and golfing when she can.

The GSA grant will be used to complete geochemical analyses using an electron probe microanalyzer. The data analysis will be conducted on 12 samples distributed throughout the Island, to complete the spatial and temporal magmatic evolution she has already determined.