Jacob Setera, Rutgers University, Piscataway, NJ for his project: Constraining the mid-temperature thermal and hydrothermal history of the Bushveld Igneous Complex: Insights from apatite U-Pb geochronology

Jacob is a PhD candidate in the Department of Earth and Planetary Sciences at Rutgers University. Originally from New Bedford, Massachusetts, Jacob received his B.S. in Geology at the University of New Hampshire. After his undergraduate education, he spent two years as a laboratory technician at the University of New Hampshire as well as being employed with the New Hampshire Geological Survey where he worked on various geologic mapping projects.

At Rutgers, working under the supervision of Dr. Jill VanTongeren, his doctoral studies focus on the magma chamber dynamics and thermal history of the world’s largest layered mafic intrusion, the Bushveld Complex in South Africa. Funding from GSA & MGPV will support his work aimed at elucidating the sub-solidus thermal evolution of the Bushveld Complex by combining high-precision apatite U-Pb age dating with already completed low-temperature $^{40}$Ar/$^{39}$Ar thermochronology. In addition to his doctoral studies, Jacob has worked on the development of in situ LA-ICP-MS isotopic methods leading to his involvement on various projects with samples ranging from zircons, HED meteorites, serpentinite, foraminifera, and tooth enamel, among others.

Outside of research, Jacob engages in scientific outreach programs for the Rutgers Geology Museum and within the local community. In his spare time, he enjoys cycling, hiking, and following his favorite hometown sports teams.