

Levben Parsons, Rutgers University-New Brunswick, Piscataway, New Jersey, USA for their project: *Redox Evolution of the Large Igneous Province (LIP) Magmas*.

Levben Parsons is a 5th year PhD candidate at Rutgers University-New Brunswick working with Dr. Ben Black. He received a BA in astronomy from Cornell University and spent several years as a science educator before returning to school for an MS in physics from the City College of New York. Now a planetary scientist, Lev is fascinated by the intersection of volcanology and planetary habitability. This work takes him across the solar system, including Mars and Titan. On Earth, he is interested in climate-impacting large igneous provinces and how the redox chemistry of their magmas evolves.



Support from the Howard and Jean Lipman Foundation will aid in funding his fieldwork sampling volcanic glasses from the North Atlantic Igneous Province in the Faroe Islands. With these samples, along with previously collected samples from the Columbia River Flood Basalts and the Central Atlantic Magmatic Province, he hopes to assess the roles of sulfur degassing, mantle source heterogeneity, crustal contamination, and oceanic crust recycling in LIP redox evolution. This work will provide constraints on mantle redox heterogeneity at scale, provide insights into the geochemical evolution of large-scale volcanism, and provide links between petrology and the geodynamics of melt transport. Implications of this work include constraints on the redox state of the voluminous gases released during these historic and often climate-perturbing eruptions. Lev is extremely grateful to the MGPV division and would like to thank them for supporting his fieldwork to the Faroe Islands and for the opportunity to expand the field of petrology.