

Lucy Hopwood, Georgia State University, Atlanta, Georgia, USA for their project: *The Value of Field Spectrometers: Mineralogical Baselines and Hyperspectral Models for Tunnel Dike*.

Keya Hopwood is a second-year geology master's student in the Department of Geosciences at Georgia State University, advised by Dr. Paulo Hidalgo. Their graduate research focuses on the mechanics of dike emplacement in large igneous provinces, centered on the Chief Joseph Dike Swarm of the Columbia River Flood Basalt Group. They investigate geochemical and textural variations across the swarm to better understand magma pulses and their outgassing effects on paleoclimates. They are also interested in the challenges and successes of underrepresented minority student inclusion in geological field experiences.

The Lipman Research Award supports Keya's M.S. capstone project: a hyperspectral inversion model incorporating laboratory geochemical data (XRD, XRF, EBSD, and spectral libraries) to evaluate the effectiveness of field UV-NIR-VIS spectrometers, aiming toward more efficient, geochemically informed sampling in the field. Keya's research is only possible due to Howard and Jean Lipman Foundation and they are thrilled to have the opportunity to do this work.

In 2025, Keya earned a B.S. in Geosciences and certificates in GIS and Sustainability from Georgia State University. As an undergraduate, their research centered on field investigation and the application of preparatory lab techniques to dike samples from the Chief Joseph Dike Swarm, alongside paleoecological work on Plio-Pleistocene molluscan extinction pulses.

Keya grew up in Namibia, surrounded by geological wonders like the Waterberg Plateau, the Etendeka traps, and the Gibeon meteorites displayed in Windhoek's city center. They moved to the US in 2021 to pursue tertiary education and currently serve as a lead teaching assistant for introductory geology labs at GSU. In their free time, they enjoy biking, collecting retro tech, and reading fantasy novels."

Thank you for the opportunity to be awarded the Lipman Research Award. I am excited to present the results in the future.

