

Tung Yuen (Daphne) Wong, University at Buffalo, Buffalo, NY for her project: *Characterizing lava channel morphologies to constrain emplacement dynamics*.

Daphne is a Master student at University at Buffalo, supervised by Dr. Tracy Gregg. Her research focuses on understanding the formation of sinuous rilles, meandering channels formed by lava emplacement, on the Moon. She uses high-resolution images from the Lunar Reconnaissance Orbiter Narrow Angle Camera to produce detailed geomorphic maps of two sinuous rilles in the Marius Hills region within ArcGIS Pro. Determining the formation mechanism of sinuous rilles will constrain the effusion rates and eruption dynamics of lunar volcanism.



Daphne is grateful for the generous support she received from the Geological Society of America. With the support of the Howard and Jean Lipman Foundation Student Research Grant, she will be studying the lava channel morphologies within flow fields associated with the Newberry volcano, Oregon. Her project aims to yield insights into emplacement dynamics and the behaviors of basaltic monogenetic volcanoes. Basaltic monogenetic scoria cones are the most common volcanoes on Earth's land. However, these volcanoes are understudied, thus their behaviors are poorly understood.

Daphne graduated from Scripps College, California in 2021 with a Bachelor of Arts in Geology. At Scripps College, she used a finite element model to study caldera ring fault formation and mapped Tuulikki Mons on Venus to interpret the geologic history of the region.