I am an Anthropological Archaeology PhD candidate studying prehistoric human adaptations in high-elevation environments that are over 2500 meters above sea level. Such extreme altitude poses severe biological and ecological challenges for humans. While we now know that humans used such settings on an ephemeral basis from the late Pleistocene, the timing and catalysts of sustained year-round human occupation of such places remain a matter of debate. My research is designed to improve our understanding of a critical socioeconomic transition that occurred during the second millennium BCE on the Tibetan Plateau, Earth’s highest and largest high-altitude landmass. At this time, significant environmental degradation saw new subsistence economies based on wheat/barley agriculture and sheep/cattle pastoralism introduced into the northeastern Plateau through emergent food exchange networks that traversed Eurasia, facilitating large-scale permanent human occupation in that region. Relative to the eastern Plateau, however, the prehistoric archaeology of its western reaches is still in its infancy; no chronometric dates yet exist, for example, for sites older than 500 BC. The dearth of research means that virtually nothing is known regarding the tempo, drivers, and nature of these key transitions in western Tibet. The EHAP Research Award that I received contributed towards a systematic excavation of a newly discovered site in the western Plateau to fill this lacuna.

From September to October, working with Chinese scholars and graduate students, I conducted systematic excavations at the site of Meilong Cave (ca. 2100-900 BC; 4670 masl) in the western Tibet Autonomous Region (Ngari Prefecture). The excavation revealed several cultural layers, which suggested that humans had occupied this cave at different periods at least since middle Holocene times. Thousands of lithic artifacts, pottery sherds, and animal bones were unearthed, as well as a limited number of metal fragments and bone tools. These discoveries will document in detail an entirely new and potentially unprecedented cultural complex in the western Plateau that will bridge the temporal and spatial gaps in our knowledge of the Tibetan prehistory during the 2nd mill. BC. With such progress, my dissertation research will provide nuanced insights into the dynamic adaptive mechanisms and cultural interactions that contributed to the large-scale, sustained human occupation of the global high-altitude environments.