Isotopic evidence for mobility and dietary strategies of the Bronze Age Tarim Mummies

The earliest well-preserved Bronze Age Tarim mummies with their ‘Caucasoid’ features and mysterious culture have for decades been at the center of debates about their origins and subsistence strategies in genetic and archaeological studies. In this talk Xueye Wang will explore the mobility and subsistence strategies of the Bronze Age Tarim mummies using multi-isotopic analysis of skeletons from one of the earliest Bronze Age cemeteries, the Xiaohe cemetary, located in an oasis in the northeastern Tarim Basin. This study enhances the potential for exploring human mobility during the earliest human occupation in the Tarim Basin and gives insights into subsistence strategies in response to extreme environments. This work also contributes to our understanding of the cultural interactions between the Bronze Age Tarim Basin and its adjacent regions.

Since 2022, Dr. Xueye Wang is a postdoctoral researcher in the PEMA lab in the Anthropology Department at UCSC. She received her PhD in Quaternary Geology at the Institute of Geology and Geophysics, Chinese Academy of Sciences. During her PhD studies, she used multi-isotope analysis of ancient human and faunal remains from the Tarim Basin from Bronze Age to historical period to investigate human migration and cultural exchange along the ancient Silk Roads. She now focuses on drafting the first PanAfrican bioavailable strontium isoscape using machine learning methods together with her supervisor Dr. Vicky Oelze. This novel isoscape has great potential to shed light on ancient and historical human migrations in Africa, including investigations of the transatlantic slave trade.