# 2019 LOVELAND STONE AGE FAIR

## BIOGRAPHY

**Dr. Michelle Bebber**
Assistant Professor, Department of Anthropology, Kent State University, Kent, Ohio

Michelle Rae Bebber is an Assistant Professor of Anthropology at Kent State University in Kent, Ohio. She has degrees in Biological Anthropology (Ph.D.), Experimental Archaeology (M.A.), Interdisciplinary Anthropology (B.A.), and Studio Art (B.A.) with a focus in ceramics. Michelle specializes in experimental archaeology and co-directs the Kent State University Experimental Archaeology Laboratory. Her research has been featured on the Discovery Channel, NPR, and Gizmodo, as well as several other media outlets. Her research involves early metal technologies, ceramic production and function, stone tools, and projectile weaponry. Michelle's current project focuses on better understanding North America's Archaic copper-using cultures. Her diverse background, which merges the fine arts and hard sciences, gives her a strong replicative skillset and a unique perspective on past tool production processes, tool innovation, modification, and general usage.

**Title of Presentation:**
***The End of North America's Copper Age: What Can Experimental Ballistics and Mechanics Tell Us?***

North America's Old Copper Culture (4000-1000 B.C.) is a unique event in archaeologists' global understanding of ancient metallurgy. For millennia, Middle and Late Archaic hunter-gatherers around the North American Upper Great Lakes region regularly made utilitarian implements out of copper, only for these items to decline in prominence and frequency during the Archaic to Woodland Transition. This decline in copper tools has generally been explained as a result of population growth and increasing social complexity. However, could it be that other factors—such as overall tool function—may have contributed to the end of North America's "Copper Age"? Dr. Bebber will discuss the results of her experimental program, which addresses this question via the functional comparison of replicated tools made from native copper versus those made of stone or bone.