

BIWEEKLY COLLOQUIUM

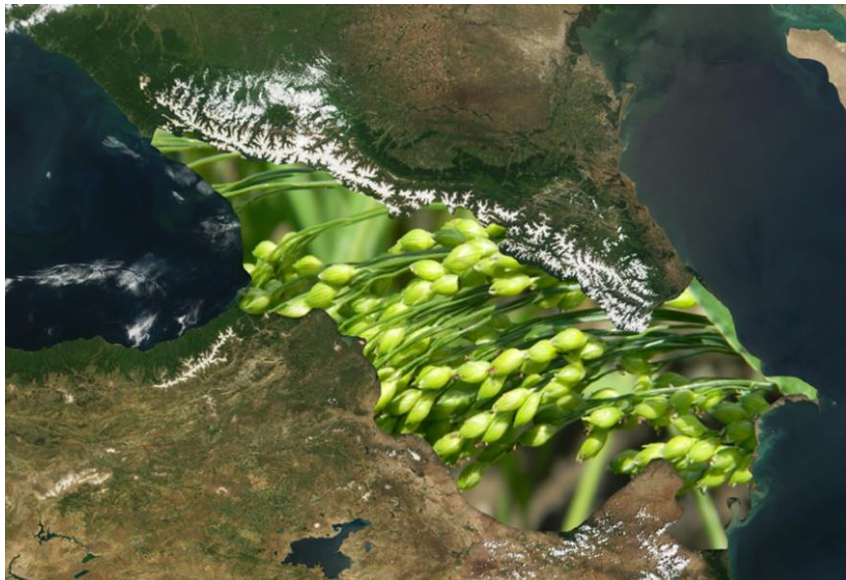
Semester topic "Human and natural resources in prehistory:
qualitative and quantitative analyses"

Monday, October 22nd, 4:15 p.m.

Millet cultivation: isotopic and archaeobotanical investigations in Southern Caucasus

Estelle Herrscher (Aix Marseille University, France)

In the history of human subsistence strategies, one of the question under debate concerns the cultivation of cereals. Whereas the earliest evidence for millet cultivation is well-known around 7,000 BC in China, its domestication through Europe to Late Bronze Age has not yet fully understood. At the crossroads of Europe, Middle East and Central Asia, the Caucasus area is a key region to precisely explore the modalities of



farming practices. Our research aims at documenting the breadth of human dietary choices from the Neolithic to the transition of Bronze Age and Iron Age in the Southern Caucasus and dating the first evidence of millet consumption. Based on data from more than 40

archeological sites located through Georgian, Azerbaijan and Armenian territory, we will show how stable isotope analysis, archaeobotanical study and radiocarbon dates can help to decipher the development of millet cultivation in this area. The animal carbon stable isotope data show a wide dispersion suggesting the presence of both C3 and C4 plants along the Kura and Araxe River. High carbon stable isotope values

recorded only for domesticated animals would suggest either the presence of wild C₄ plants in the surrounding environment or mobility of herds since the Early Bronze Age. A shift in carbon isotope values for some animals and humans would indicate a change in cereal cultivation, which could be attributed to millet crop and its consumption in the Middle Bronze Age (1939–1774 cal B.C./1621–1450 cal B.C.). This dietary pattern is also observed during the Late Bronze Age with a wider isotope heterogeneity for humans, questioning the impact of environmental and cultural factors on dietary practices breadth.

Venue: Leibnizstraße 1, Seminar Room 204