

Dr. Eleanora A. Reber

Anthropology Program
University of North Carolina at Wilmington
601 S. College Road
Wilmington, North Carolina
28403
(910) 962-7734
fax (910) 962-3543
rebere@uncwil.edu

39 Northern Boulevard
Wilmington, North Carolina
28401
(910)251-8461

Education

Ph.D., Harvard University Department of Anthropology, June 2001
A.M., Harvard University Department of Anthropology, June 2001
Bachelor of Science in Anthropology, Beloit College, May 1995
Bachelor of Science in Chemistry, Beloit College, May 1995

Grants and Honors

Cahill Award for Faculty Research and Development, UNC Wilmington, December 2003.
National Science Foundation Dissertation Improvement Grant: Detection and Identification of Maize in Absorbed Pottery Residues: Development and Application, Award # BCS-9980294, March 2000.
Mellon Foundation Dissertation Top-Up Award, May 1999.
Harvard Anthropology Department Research Project Award, May 1999.
'Pass with Distinction' in General Examination in Archaeology, Harvard University, January 1998.
National Science Foundation Graduate Research Fellowship 1996-1999.
Mellon Foundation Pre-Dissertation Grant, 1998
Mellon Foundation Training Grant, 1997

Publications and Presentations

"Direct Detection of Maize Processing in Archaeological Pottery Through Compound-Specific Stable Isotope Analysis of *n*-Dotriacontanol in Absorbed Organic Residues" by Eleanora A. Reber, Stephanie N. Dudd, Nikolaas J. van der Merwe, and Richard P. Evershed. Accepted by *Antiquity, an International Journal of Expert Archaeology*, 10/2/03, for publication 6/2004.

"Identification of maize in absorbed organic residues: a cautionary tale" by Eleanora A. Reber and Richard P. Evershed. *Journal of Archaeological Science*, 31(4): 399-410. April 2004

“How Did Mississippians Prepare Maize? The Application of Compound Specific Carbon Isotopic Measurements to Absorbed Pottery Residues from several Mississippi Valley sites,” by Eleanora A. Reber and Richard P. Evershed. *Archaeometry* 46(1): 19-33. February 2004.

“Absorbed Residue Analysis and the Detection of Maize and Native C₃ Plants in a Varied Mississippian Diet,” by Eleanora Reber in *Mississippian Archaeology of the American Southeast*, a General Session in *Society for American Archaeology 2002*, Denver, CO

“Ancient Vegetarians?: Absorbed Pottery Residue Analysis of Diet in the Late Woodland and Emergent Mississippian Periods of the Mississippi Valley,” by Eleanora Reber in *Southeastern Archaeological Conference 2001*, Chattanooga, TN

“Midwest/American Bottom Pottery and Maize Production,” by Eleanora A. Reber in *Ceramic Ecology XV: Current Research on Ceramics, the fifteenth Annual Ceramic Ecology Symposium at the American Anthropology Association 2001*, Washington DC

“How Did Mississippians Prepare Maize? The Application of Compound Specific Carbon Isotopic Measurements to Absorbed Pottery Residues from several Mississippi Valley sites,” by Eleanora A. Reber and Richard P. Evershed in *Resolution and Refinement: Leading Edge Research in Archaeological Chemistry, a SAS sponsored symposium at the Society for American Archaeology meetings 2001*, New Orleans.

“A-Maize-ing Science: Using compound specific isotope techniques to investigate form/function relations in Mississippi Valley pottery,” by Eleanora A. Reber, in *Southeastern Archaeology Conference 2000, Macon, Georgia*.

“What Did They Eat?,” by Eleanora Reber in *Anthropology Newsletter*. February 1999: 25. Reprinted 2001 in *Archaeology 01/02 Annual Editions*, McGraw-Hill/Dushkin, Guilford, CT.

“Summary Report on 1995 Excavations at the Barton Site (23SL69), St. Louis County, Missouri,” by Joseph M. Galloy, Ronald L. Sanders, Brant Vollman, James Fitzsimmons, Eleanora A. Reber, Kathryn E. Parker, Eve Hargrave and Kristin Hedman in *Missouri Archaeologist* 59: 99-124, December 1998.

“The Issue of Canid Domestication at the Barton Site, a Late Woodland-Early Mississippian Site in Missouri,” by Eleanora Reber and James Fitzsimmons, in *Animal Vegetable, Mineral: Using Specialist Studies in Archaeological Interpretation*, the 4th Annual Open Forum for Graduate Students, 1998.

Reports

“The Fragrant Blob: possible origins of a fragrant essence extracted from a pumice fragment at the site of Cumae/Isis” a report submitted to Nancy Pinto-Orton, of the University of Pennsylvania Museum, January 2003.

“Report on a preliminary project on the identification of maize in absorbed pottery residues from sites throughout the New World,” by Eleanora A. Reber in *Archaeological Data Recovery Excavations and Monitoring New Jersey Route 29, City of Trenton, Mercer County, New Jersey, Volume V: Supplementary Technical Materials*. Hunter Research, Inc. 2001.

“Faunal Remains Analysis,” by James Fitzsimmons and Eleanora A. Reber, in *Late Prehistoric Life Along the Missouri River I: The Barton Site (23SL69)*, Joe Galloy, editor. Hanson Engineers Incorporated, 1997.

Previous Experience

Assistant Professor, University of North Carolina at Wilmington,

2003-present. Classes taught:

General archaeology

Archaeology Lab

Archaeology of the Southeastern United States

Old World Archaeology

Experimental Archaeology

Archaeological Field school

Lecturer, University of North Carolina at Wilmington, 2001-

2003. Classes taught:

Archaeological field school

Introduction to Anthropology

General Archaeology

Archaeology Lab

Old World Archaeology

Archaeology of the Southeastern United States

Physical Anthropology

Director, UNC Wilmington American Bottom Archaeological Research Project, Summer 2003, 2004

Field School Supervisor, Cahokia Palisade Project

Northwestern University Field School, 1998

Western Michigan University Field School, 1999

Assistant Head Teaching Fellow, Harvard University, 1998

Science B-29: Human Behavioral Biology

Teaching Fellow, Harvard University

Science B-29: Human Behavioral Biology, 1998-1999

Social Analysis 50: Urban Revolutions, 1999

Archaeometric Consultant, Greenwood and Associates, 1996

Archaeological Field Technician

Greenwood and Associates, California, 1996

Archaeological and Historical Consultants, Pennsylvania, 1995-6

Mississippi Valley Archaeology Center, Wisconsin, 1995

Laboratory Director/Excavator, Gottschall Rockshelter,

Wisconsin, 1994

Other Scholarly Activities

Associate editor for Archaeological Chemistry, *Society for Archaeological Sciences bulletin*

Grant reviewer for Petroleum Research Fund, American Chemical Society, 6/04.

Reviewed *Archaeology and Prehistory* by Pamela Crabtree and Douglas Campana for McGraw-Hill publishers, 9/03

Session Chair of "Mississippian Archaeology of the American Southeast," 2002 Society for American Archaeology meetings, Denver. April 2002.

Professional Affiliations

American Anthropological Association

Society for American Archaeology

Society for Archaeological Sciences

Southeastern Archaeological Conference

Cahokia Mounds Museum Society

American Chemical Society

Research

“The Fragrant Blob”: A Piece of Pumaceous Tuff Used as a Possible Brazier Stone from the Cumae/Isis site.

Utilized absorbed organic residue techniques on a piece of pumaceous tuff from the Cumae/Isis site with a strong, elusive odor. The stone was interpreted as a potential brazier stone, which had scented fish or whale oil poured over it, and was then gently heated to produce a perfumed odor. Report submitted 1/2003

Detection and Identification of Maize in Absorbed Pottery Residues Using Compound Specific Isotopic Techniques,

Doctoral Dissertation Project. Performed absorbed residue extraction and processing on 130 archaeological sherds from 15 sites around the Mississippi Valley, as well as 20 experimental control sherds, in the largest absorbed residue study performed in the New World. Detected the presence of maize using a Gas Chromatograph-Combustion-Isotope Ratio Mass Spectrometer. Interpreted these findings in terms of the form/function debate, the socio-cultural changes of the Emergent Mississippian and Mississippian time periods, and the advent of maize agriculture in the Mississippi Valley. Analysis performed at the University of Bristol Biogeochemical Molecular Research Unit, with Dr. Richard P. Evershed. (1997-2001)

Residue Analysis at the Early Bronze Age Site of Nahal Tilleh.

Utilized GC/MS techniques to analyze 25 sherds from the Late Early Bronze Ib site of Nahal Tilleh, located in the Southern Levant. Extraction performed at Harvard University Archaeometry Laboratory, instrumental work performed at Woods Hole Oceanographic Institute, with Dr. John Hayes and Sean Sylva. (1999-2000)

A Pilot Project on the Identification of Maize in Absorbed Residues on Pottery from a Variety of New World Locations.

Performed residue extraction and tentative identification of the presence of maize on sherds volunteered from a variety of New World Archaeological contexts. (Spring-Fall 1999)

Ceramic Petrography of Sherds from the Cahokia Palisade Project. Performed petrographic examination on thirty-one sherds plus local clay samples from the excavations of the Cahokia Palisade project of 1998. (Spring 1999)

Ceramic Petrography of the Central Greece Project.

Performed petrographic analysis on a variety of potsherds from the Helladic sites of Kirrha and Orchomenos, as part of the Central Greece Project. (Fall 1998)

A Report on the Uses of Residue Fractionation in the Study of Highly Degraded Lipid Residues from the Easingwold Site, West Yorkshire. Evaluated traditional assumptions concerning pottery residue survival and analysis. Suggested a technique for addressing flaws in these assumptions. (June-August 1997)

Metallography of Protohistoric Fort Ancient Copper Artifacts from the Madisonville Site. Performed metallographic analysis on five samples taken from native copper, European copper, and brass artifacts excavated at the Madisonville Site in Ohio around 1897. (Spring 1997)

Osteological Examination of Faunal Remains at the Bridgeton Site in Missouri. Performed osteoarchaeological analysis on over 30,000 bone fragments comprising the faunal assemblage from the Bridgeton Site, an emerging Mississippian site in Missouri. (Fall 1996)

Confirmation of Possible Quicklime Production at Gottschall Site. Tested a hypothesis of possible quicklime production at the Gottschall Site. Results and conclusions presented at the Beloit College Research Symposium, April 1995.

Extraction and Analysis of Potsherd Residues from the Gottschall Site. Judged various non-destructive methods of extracting residue from excavated potsherds, and then identified residues using the Gas Chromatograph/Mass Spectrometer. (Spring 1995)