

CURRICULUM VITAE

Carlos E. Cordova, Ph.D.

Professional Preparation

University of Texas at Austin	Geography	Ph.D. 1997
National Autonomous Univ. of Mexico (UNAM)	Geography	M.A. 1991
National Autonomous Univ. of Mexico (UNAM)	Geography	B.A. 1988

PhD dissertation

Dissertation: *Landscape Transformation in Aztec and Spanish Colonial Texcoco, Mexico.*

Director: Karl W. Butzer (University of Texas at Austin).

Appointments since completion of doctoral degree

2003-present: Associate Professor, Oklahoma State University, Geography.

1997 to 2003: Assistant Professor, Oklahoma State University, Geography

1996-1997. Consultant. TRC- Mariah Associates Inc., Austin, Texas.

Research fields and regional focus

Geoarchaeology, geomorphology and soils, Quaternary palynology (pollen and phytoliths).

Geographical areas of research

Current: Middle East, Eastern Mediterranean, Black Sea Region, Great Plains of North America, Southern Africa.

Other/previous: Mexico, south-central Alaska.

Current research projects and sponsors

Linking flora, fauna, and climate in prehistoric contexts using modern assemblages of pollen and phytoliths in the Near East and Southern Africa. National Endowment for the Humanities-American Schools of Oriental Research (2006-2007).

Global Paleofire Initiative. Various UK Natural Science Council via the School of Geography at the University of Bristol, UK (2007-2008).

International Geological Correlation Project 521: Black Sea-Eastern Mediterranean Corridor during the past 30 ky. UNESCO-IGCP Programme (2005-2008).

- Vegetation response to glacier retreat in Harvard Fjord and Portage Lake, Alaska.* National Geographic Society (2005) PI: Joao Santos, University of Coimbra, Portugal.
- Paleoecology and Geoarchaeology of the ancient chora of Tauric-Chersonesos, Crimea, Ukraine.* Institute of Classical Archaeology, Univ. of Texas, and Packard Humanities Foundation. (1999-2001)
- Soil erosion, rivers, and vegetation in Northern Moab since pre-agricultural times.* National Geographic Society. 1999-2001.
- Geoarchaeology of alluvial systems in Chalco, Mexico.* Heinz Foundation via. Univ. of Houston. 1994-1996
- Landscape transformation in Aztec and Spanish-Colonial Texococo, Mexico. NSF, Dissertation Improvement Grant 1993-1995.

Scientific and editorial appointments

- North American Book Review Editor for *The Holocene*, Sage Publications (2004-present)
- Coordinator of the Palynology Work Group (WG-2) and EMBSecBIO for the UNESCO-sponsored IGCP-521, Black Sea-Mediterranean Corridor. (2005-2008).

Refereed Publications

Books

- Cordova, C.E.**, 2007. *Millennial Landscape Change in Jordan. Geoarchaeology and Cultural Ecology* Tucson: University of Arizona Press.

Articles in scientific journals and book chapters

- Cordova, C.E.**, 2010. Palynology of anthropicized landscapes in Jordan: a survey of modern and fossil records of *Quercus*, *Pistacia* and *Olea* pollen. In *Archaeology of Anthropogenic Environments*, ed. By Rebecca Dean, 95-121. Center for Archaeological Investigations, Occasional Paper No. 37. Carbondale: Southern Illinois University.
- Cordova, C.E.**, and Agenbroad, L., 2009, Opal phytoliths from teeth calculus in the mammoths of the Hot Springs Site, South Dakota, *Current Research in the Pleistocene* 26, 145-147.

- Cordova, C.E.**, S. Harrison, P. Mudie, S. Leroy and N. Ortiz. 2009. Pollen, plant macrofossil and charcoal records for paleovegetation reconstruction in the Mediterranean-Black Sea Corridor since the Last Glacial Maximum. *Quaternary International* 197, 12-26.
- Santos, J. and **Cordova, C.E.** 2009. Little Ice Age glacial morphology and sedimentology of Portage Glacier, south-central Alaska. *Finisterra* 87, 95-108.
- M. J. Power, J. Marlon, N. Ortiz, P. J. Bartlein, S. P. Harrison, F. E. Mayle, A. Ballouche, R. H. W. Bradshaw, C. Carcaillet, **C. Cordova**, and others. 2008. Changes in fire regimes since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. *Climate Dynamics* 30: 887-907.
- Cordova, C.E.** 2008. Floodplain degradation and settlement history in Wadi al-Wala and Wadi ash-Shallalah, Jordan. *Geomorphology* 101: 443-457.
- Butzer, K.W., Abbott, J. T., Frederick, C.D., Lehman, P.H., **Cordova, C.E.**, and Oswald, J.F. 2008. Soil-geomorphology and ‘wet’ cycles in the Holocene record of North-Central Mexico. *Geomorphology* 101: 237-277.
- Cordova, C.E.** 2008. Holocene Mediterraneanization of the Southern Crimean vegetation: paleoecological records, regional climate change, and possible non-climatic influences. In *The Black Sea Flood Question: Changes in Coastline, Climate, and Human Settlement*, ed. V. Yanko-Hombach, A.S. Gilbert, N. Panin, and P.M. Dolukhanov., 319-344. Berlin: New York: Springer
- Cordova, C.E.**, and W. Johnson. 2007. Paleobiomes and Paleopastures: a reconstruction of interactions of vegetation, climate, grazing and fire in South-Central North America since the Last Glacial Maximum. *Current Research in the Pleistocene* 24: 196-198.
- Bisson, M., A. Nowell, **C.E. Cordova**, R. Kalchgruber, and Maysoun Nahar. 2007. Human evolution at the crossroads: An archaeological survey in Northwest Jordan. *Near Eastern Archaeology* 69 (2): 73-85.
- Cordova C.E.**, J.C. Porter, K. Lepper, R. Kalchgruber, and G. Scott, 2005. Sand dune morphology and stability along a bioclimatic gradient in north-central and northwestern Oklahoma. *Great Plains Research* 15 (2): 227-250.
- Cordova, C.E.** and P.H. Lehman. 2005. Holocene environmental change in Southwestern Crimea (Ukraine) in pollen and soil records. *The Holocene* 15, 263-277.
- Cordova, C.E.** and P.H. Lehman. 2003. Achaeopalynology of synanthropic vegetation in the Chora of Chersonesos, Ukraine. *Journal of Archaeological Science*. 30, 1483-1501.
- Henry, D.O., **C. Cordova**, J. J. White, R. M. Dean, J. E. Beaver, H. Ekstrom, S. Kadowaki, J. McCorrison, A. Nowell, and L. Scott-Cummins. 2003. The Early Neolithic Site of Ayn

- Abū Nukhayla, Southern Jordan. *Bulletin of the American Schools of Oriental Research* 330, 1-30.
- Cordova, C.E.**, A. Rybak and P. Lehman. 2001. Vegetation Patterns and Conservation Issues in Southern Crimea, *Post-Soviet Geography and Economics* 42(5) 49-72.
- Cordova, C.E.** 2000. "Geomorphological Evidence of Intense Prehistoric Soil Erosion in the Highlands of Central Jordan", *Physical Geography* 21(6) 538-567.
- Henry, D.O., J. Beaver, J. White, H. Brauer and **C. Cordova** 2000. Investigation of the Early Neolithic site of Ain Abu Nekheileh (J701), 1999 season. In Egan, V. et al. (Ed) *Archaeology of Jordan . American Journal of Archaeology* 104:569-570.
- Cordova, C.E.** 1999. Landscape Transformation in the Mediterranean-Steppe Transition Zone of Jordan: A Geoarchaeological Approach. *The Arab World Geographer*, 2 (3) 182-201.
- Cordova, C.E.** 1999. Geoarchaeology of alluvial deposits and soils in the wadi systems of Northern Moab, in P.M. and V. Egan, *Archaeology in Jordan. American Journal of Archaeology*, 103 (3) 488-489.
- Cordova, C.E.** and J. Parsons. 1997. Geoarchaeology of an Aztec Dispersed Village. *Geoarchaeology* 12 (3): 177-210.
- Martin Del Pozzo, A.L., **C.E. Cordova**, and J. López. 1997. Volcanic Impact on the Southern basin of Mexico during the Holocene, *Quaternary International* 43-44(1):181-190.
- Lugo, J. and **C. Cordova**. 1996. The Geomorphological map of Mexico at scale 1:4' 000 000. *Zeitschrift für Geomorphologie [Annals of Geomorphology]*. Supplement 103, pp. 313-322.
- Cordova, C.E.**, Martin del Pozzo, A.L. and López-Camacho, J. 1994. Paleolandforms and Volcanic Impact on the Environment of Prehistoric Cuicuilco, Southern Mexico City. *Journal of Archaeological Science* 21, 586 – 596.
- Cordova, C.E.** and A. Vazquez. 1991. El ciclo agrícola anual en al Cuenca Media del Balsas [The annual agricultural cycle in the Middle Balsas Basin] *Geografía y Desarrollo*, 2, no. 3, 23-29.

Refereed publications accepted for publication or in press

- Cordova, C.E.**, Gerasimenko, N., and Kliukin, A.A., (In press) Late Pleistocene and Holocene paleoenvironments of Crimea: pollen, soils, geomorphology, and geoarchaeology in Buynevich, I., *Geology and Geoarchaeology of the Black Sea Region: Beyond the Flood*

Hypothesis, Geological Society of America, Special Paper, Boulder, CO. Expected publication date: Mid-2010

Cordova, C.E., Johnson, W.C., Mandel, R., and Palmer, M. Opal phytoliths, carbon stable isotopes, and other microfossils from soils and paleosols of the south-central Great Plains, USA. *Catena* (Elsevier's journal on soil science).

Refereed publications in review

Cordova, C.E. and Scott, L. The potential of Poaceae, Cyperaceae, and Restionaceae phytoliths to reflect past environmental conditions in South Africa. *Palaeoecology of Africa* (peer-reviewed periodical published by Taylor and Francis Publications, UK).

Refereed publications in progress

Cordova, C.E. *Crimea: its biogeography and environmental history* (Book proposal for submission in January 2010)

Michael Benedetti, Tim Beach, and **Carlos Cordova** (Editors) Soils, Sediments, and Geoarchaeology, special issue in *Catena*. (Co-edited Volume).

Cordova, C.E., Nowell, A., Bisson, M., and Ames, C. Kalchgruber, R., Ghaleb, B. Geomorphological and soil stratigraphic patterns associated with the Middle Paleolithic on the Madaba Plateau, Jordan: The case of the Ma'in Site Complex. *Journal of the Israel Prehistoric Society*.

Non refereed publications

Cordova, C.E., Rollefson, G.O., Kalchgruber, R., Wilke, P., and Quintero, L. 2008. Natural and Cultural Stratigraphy of 'Ayn as-Sawda, Azraq Wetland Reserve: 2007 Excavation Report and Discussion of Finds. *Annual of the Department of Antiquities of Jordan* 52: 417-425.

- Cordova**, C.E., Nowell, A., Bisson, M. Kalchgruber, R., and Al-Nahar, M. 2007. Geomorphological assessment of Middle Paleolithic Sites in the Madaba Plateau. *Annual of the Department of Antiquities of Jordan* 51, 329-337.
- Cordova**, C.E. 2007. The Evolving Landscape of Jordan: The Contributions of Geoarchaeology and Paleoecology. In *Crossing Jordan – North American Contributions to the Archaeology of Jordan*. Eds. T. E. Levy, P. M. M. Daviau, R. W. Younker and M. Shaer. London: Equinox Publications, 69-78. Equinox Publications.
- Bisson, M., A. Nowell, **C.E. Cordova**, and R. Kalchgruber. 2007. Neanderthals at the Crossroads: Middle Paleolithic sites on the Madaba Plateau, Jordan. In *Crossing Jordan – North American Contributions to the Archaeology of Jordan*. Eds. T. E. Levy, P. M. M. Daviau, R. W. Younker and M. Shaer. London: Equinox Publications, 179-188. Equinox Publications.
- Cordova**, C.E., and P.H. Lehman 2007. Mediterranean agriculture in southwestern Crimea: paleoenvironments and early adaptations. *Beyond the Steppe and the Sown*. Proceedings of the 2002 University of Chicago Conference on Eurasian Archaeology, Colloquia Pontica 13, ed., D.L. Peterson, L.M. Popova and A.T. Smith, 425-447. Leiden: Brill.
- Cordova**, C.E. 2005. The degradation of the Ancient Near Eastern environment. In D. Snell, *A Companion to the Ancient Near East*. Malden, MA, 209-225. London UK: Blackwell .
- Cordova**, C.E. 2003. Reconstructing environmental history. In *McGraw-Hill Yearbook of Science & Technology*, 352-354. New York: McGraw-Hill
- Cordova**, C.E. 2000. Holocene Landscape Transformation in Southwestern Crimea: Research Problems, Methodology, and Preliminary Results.” In *Ukraina ta Globalni protsesy: Geografichny Vymir* (Ukraine and the Global Processes: a Geographical Dimension), ed. by the Ukrainian Geographical Society, 178-183, Kyiv-Lutsk: Vezha, 2000 (In English with an abstract in Ukrainian).
- Henry, D.O., **C.E. Cordova** J.E. Beaver, J.J. White, H.A. Bauer, 1999. Investigation of the Early Neolithic Site of Ain Abu Nekheileh (J701), 1999 Season. *Neo-Lithics: A Newsletter of Southwest Asian Lithics Research*, 3, 3-5. Berlin: Ex-Oriente.

Technical reports

- Cordova**, C.E. , P.H. Lehman and N.P Gerasimenko, (2001) Paleoecological investigations in the Heraklean Peninsula and adjacent areas. In (Institute of Classical Archaeology Staff, Eds.) *The Study of Ancient Territories: Chersonesos and Metaponto. 2001 Annual*

- Report*. Austin: Institute of Classical Archaeology, University of Texas at Austin, pp. 43-46.
- Lehman, P.H. and **C.E. Cordova**. 2000. Geoeconomic, Geomorphologic and Palynological Investigations. In (Institute of Classical Archaeology Staff, Eds.) *The Study of Ancient Territories: Chersonesos and Metaponto. 2001 Annual Report*. Austin: Institute of Classical Archaeology, University of Texas at Austin, pp. 43-46.
- Quigg, J.M. and **C.E. Cordova**. 2000. *Data recovery at 41ZP364: An Upland Campsite at Falcon Reservoir, Zapata County, Texas*. TRC Technical Report No. 22317. TRC-Mariah Associates Inc., Austin, Texas.
- Quigg, J. M. and **C.E. Cordova**. 1999. Archaeological Investigations at Upland Sites 41ZP39 and 41ZP176 for Trans Texas Gas Well Site USA #3 Falcon Reservoir Zapata County, Texas. TRC-Mariah Associates Inc. Technical Report No.22347, Austin, Texas.
- Quigg, J. M. and **C.E. Cordova**. 1997. *Laredo Economically Distressed Areas Program: An Archaeological and Geomorphological Investigation, Webb County, Texas*. TRC-Mariah Associates Inc. Project No.22061B, Austin, Texas.

Published teaching aid materials

- Cordova, C.E.** (Editor). 1998-2003 GEOG 1114 *Physical Geography Laboratory Manual*. Department of Geography, Oklahoma State University, Stillwater, OK.
- Cordova, C.E.** 1993. *Geomorfología para estudiantes de Arqueología* [Geomorphology for Archaeology students]. Mexico City: Escuela Nacional de Antropología e Historia, 178 p.
- Cordova, C.E.** and S. Levi-Levi. 1993. *Cómo acercarse a la geografía* [How to approach geography] Mexico City: Limusa-Consejo de la Cultura y las Artes and Fondo Editorial de Querétaro, 91 p.

Internal funding

- 2008 Arts and Sciences Spring Travel Research Grant \$1000
- 2006 Arts and Sciences Summer Research Travel Grant \$1000
- 2005 Arts and Sciences Summer Research Travel Grant \$500
- 2003 Arts and Sciences 1+1 Program. 1 month of salary + \$1000.
- 2002 Arts and Sciences Summer Research Travel Grant. \$500
- 1999 Arts and Sciences 1+1 Program. 1 month of salary + \$1000.

1999 Dean's Incentive Grant \$3,000

1998 Dean's Incentive Grant, \$3,000.

Extramural funding

2007-2009. Social Science and Humanities Research Council of Canada. Neanderthal Lifeways in Jordan (Co-PI with A. Nowell and M. Bisson) (\$146,000).

2006-2007- National Endowment for the Humanities-American Center of Oriental Research. Research scholarship abroad. Linking flora, fauna, and climate in prehistoric contexts using modern assemblages of pollen and phytoliths in the Near East and Southern Africa (\$20,000).

2001 Association of American Geographers Research Grants. Start-up grant. Project: Funds to defray costs of pollen sample processing for an ongoing study in Jordan (\$690.00)

1999-2001 Consulting and collaborative research on palynological studies of Chersonesos Crimea. Funds from the Packard Humanities Institute and the Institute of Classical Archaeology, Univ of Texas at Austin (\$23,000).

1999-2000 ICSC-World Laboratory, Lausanne, Switzerland. Grant to bring a Jordanian student to the Environmental Science Program for one year (\$9,000).

1999-2000 National Geographic Society, Committee for Research and Exploration. Project: Soil erosion, rivers, and vegetation in Northern Moab since pre-agricultural times (\$19,295).

1993-1994 National Science Foundation. Dissertation Improvement Research Grant. Landscape Transformation in Aztec and Spanish Colonial Texcoco (\$9,730).

Current professional affiliations

Association of American Geographers (AAG)

American Schools of Oriental Research (ASOR)

Society for Phytolith Research (SPR)

American Quaternary Association (AMQUA)

Center for the Study of the First Americans (CSFA)

Southern African Society for Quaternary Research (SASQUA)

Recent papers presented in the following meetings

Association of American Geographers Annual Meetings 2005, 2006, 2007, 2009

Biennial Meeting of the Southern African Quaternary Association, Knysna, South Africa, 2009
Prehistory of Jordan Conference, Amman, Jordan, 2009
International Meeting for Phytolith Research, Mar del Plata, Argentina, 2008
Society for American Archaeology Annual Meeting, Austin, TX, 2007
Plains Archaeology Conference, Rapid City, SD, 2007
Biennial Meeting of the American Quaternary Association, Bozeman, MT, 2006
Archaeology of Anthropogenic Environments, Carbondale, IL, 2006
International Geological Correlation Programme – 521, Istanbul, Turkey 2005
Biennial Meeting of the American Quaternary Association, Lawrence, KS, 2004,
International Quaternary Association Meeting, Reno NV, 2003

PhD and MS advisees

Current

Jason Joines, MSc in Natural Sciences, Oklahoma State University (2007-present)
Chris Ames, PhD, Anthropology, McGill University, (2009-present). (Co-advisor)
Jessica Hoskins, MSc, Anthropology, University of Victoria (2009-present) (Co-advisor).

Graduated

Brad Rogers, MSc, Geography, Oklahoma State University, 2008
Jess C. Porter, PhD, Geography, Oklahoma State University, 2007
Jeff Liles, MSc, Geography, Oklahoma State University, 2007
Chad Rhinewald, Geography, Oklahoma State University, 2006
Serena Aldrich, Geography, Oklahoma State University, 2003
Darla Fagan, Geography, Oklahoma State University, 2000

Courses taught at Oklahoma State University

Undergraduate level

GEOG 1114 Physical Geography
GEOG 2253 World Regional Geography
GEOG 4053 Biogeography
GEOG 4023 Geography of Arid Lands*

Graduate level

GEOG 5023 Geography of Arid Lands*

GEOG 5403 Current Geographic Research

GEOG 5450.2 Seminar in Physical Geography

GEOG 6013 Quaternary Paleoecology*

GEOG 4073/5073 Environmental History and Geoarchaeology* (Former GEOG 5450.352

Historical Ecology and Geoarchaeology)

* I created these courses

Scholarly awards

2002 ASFC Junior Faculty Award for Scholarly Excellence. Oklahoma State University.

1995 Summer Research Travel Award. EBR/American Schools of Oriental Research.

1994 University of Texas Dissertation Writing Fellowship (1994-1995).

1993 E.D. Farmer Fellowship for doctoral students doing research in Latin America. 1993-1994.

1991 DGAPA-UNAM scholarship for graduate studies abroad. Universidad Nacional Autónoma de México (1991-1995).

1988 Gabino Barreda Medal. Undergraduate award. Universidad Nacional Autónoma de México.

Academic service and extension

University and College Level

Chair of Arts and Sciences Curriculum and Extension Committee, 2006-2007

Geography Faculty at the Arts and Sciences Faculty Council, 2005-2008

Review Committee for the Study Abroad Bradley Fellowship, Oklahoma State University, 2000-2003.

Department Level

Graduate Committee, Personnel Committee, Colloquium/Lecturship committee, Health and Safety

Extension

Member of the OSU Tallgrass Prairie Preserve Steering Committee, (2006-present).

International

External graduate review for the Department of Geography and Environment, University of Cape Town, South Africa (2006-present).

Organizer of the 8th International Meeting on Phytolith Research, Denver, CO, September 2010.

Linguistic skills

Language	Fluent*	Reading and conversation	Reading and basic expressions	Often used in research
Afrikaans			X	X
Arabic (Modern Standard and Levantine colloquial)		X		X
English	X			X
Dutch				X
French		X		X
German		X		X
Hebrew			X	X
Italian		X		
Portuguese		X		
Spanish (native)	X			X
Russian	X			X
Ukrainian			X	X

* Fluent in this case means that I am able to give a lecture and maintain a discussion on issues related to my field of expertise.

Extracurricular activities and interests

Hiking and biking

Russian literature and cinema

Arabic classical, folk, and pop music

Modern Egyptian literature and cinema

Wildlife and Parks

Modern drama

World War II and Cold War History

Aviation History

Cowboy history

Comparative linguistics

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