

Jennie O. Sturm

E-mail: jsturm@unm.edu

EDUCATION

M.A. in Anthropology, University of Denver; Denver, Colorado, 2006

Thesis title: "Colonial Encounters at El Brujo, Peru: Studying a 16th Century Spanish Church and Town Using Ground-Penetrating Radar"

Thesis advisor: Lawrence B. Conyers

B.A. in Anthropology, minor in Geology. Magna Cum Laude, Phi Beta Kappa, University Honors. University of Denver; Denver, Colorado, 2004

PROFESSIONAL EXPERIENCE

I have over 14 years of geophysical archaeological experience. I have worked with CRM firms, government agencies, non-profits, and academic institutions providing geophysical consulting in a variety of contexts. These include both historic and prehistoric archaeology, cemeteries and burial studies, historic preservation, environmental/geological studies, and construction. In September 2006, I founded TAG Research by Sturm Inc., a consulting company specializing in geophysical prospection and mapping. I have experience conducting geophysical surveys and analyzing/processing geophysical data from 15 U.S. states and six countries, and I have authored or co-authored over 50 technical reports and 10 peer-reviewed publications. I am currently pursuing a PhD at the University of New Mexico, using geophysical and remote sensing methods to study prehistoric land use patterns in Chaco Canyon, New Mexico.

RESEARCH EXPERIENCE

Geophysical and mapping specialist and Research Assistant, Chaco Canyon National Historical Park, W.H. Wills and Patricia Crown, University of New Mexico May 2012-present

Project role includes RTK GNSS, total station, and geophysical mapping and data analysis and interpretation for ongoing research involving both prehistoric and historic sites at Chaco Canyon. Also assisting in building and managing GIS databases and performing other spatial analyses for project. Data and maps have been used to guide excavations and plan for future work.

Geophysical and mapping specialist, Pottery Mound, Isleta Pueblo, New Mexico. June 2014-present

Project role includes the collection, analysis, and interpretation of ground-penetrating radar and high-precision GPS data to identify and map buried architecture and features at Pottery Mound, Isleta. Role also includes consulting on mapping technologies and coordination with other geospatial specialists to facilitate preservation of site. Data and maps are being used to focus management efforts and preservation.

Geophysical specialist, Jemez Pueblo Project, Matthew Liebmann, Harvard University June 2010-2014

Project role includes the collection, analysis, and interpretation of ground-penetrating radar data to identify buried architecture and features at several Pueblo III sites and Spanish colonial sites in the Jemez, New Mexico. Maps and data have been used in conference presentations (*SAA 2012*) and publications (2012, Liebmann, Matthew, *Revolt: An Archaeological History of Pueblo Resistance and Revitalization in 17th Century New Mexico*, University of Arizona Press, Tucson).

Geophysical specialist, Goddard/NASA Space Archaeology Grant Project at Gordion, Turkey July 2010-April 2012

Objectives for project include studying buried architecture, tombs, and impact of land use on archaeological sites through the use of geophysics and satellite remote sensing. Project role involves the collection, analysis, and interpretation of ground-penetrating radar and magnetometry data, and development of research goals involving geophysical mapping.

Mapping specialist, Magdalena de Cao Viejo Project, Peru, Jeffrey Quilter, Harvard University 2005-2008

Objectives for project include studying interaction of Spanish and native populations during early colonial period in Peru. Project role involved the collection, analysis, and interpretation of ground-penetrating radar data, total station mapping, and GIS mapping and database management. Maps have been used to guide excavation placement, as well as study layout of features, and use and alteration of space. Also assisted with excavations and designing and building project website.

Ground-penetrating radar specialist, Tel Nami and Raqefat Cave Projects, Yossi Salmon and Dani Nadel, University of Haifa, Israel June -July 2006

Objectives for Tel Nami project include studying coastal environment of this Bronze-age site, including mapping bedrock, water tables, and sediment interfaces. Project role involved the collection, analysis, and interpretation of ground-penetrating radar data. Objectives for Raqefat Cave project include studying Natufian burial offerings. Project role involved assisting in the collection, analysis, and interpretation of ground-penetrating radar data.

TEACHING EXPERIENCE

- Guest Lecturer, Anthropology (ANTH) 582L: Geoarchaeology, Professor Bruce Huckell, University of New Mexico, *May 2016*
 - Title of Lecture: "Geophysics in Archaeology: Overview and Basics"
- Guest Lecturer and RTK GNSS Workshop, American Society for Photogrammetry and Remote Sensing—UNM Chapter, *December 2015*
 - Title of Lecture: "RTK GNSS: Overview and Basics"
- Guest Lecturer, Earth and Planetary Sciences (EPS) 400: Environmental and Applied Geophysics, Professor Lindsay Worthington, University of New Mexico, *March 2016 and February 2015*
 - Title of Lecture: "Applications of Ground-Penetrating Radar"
- Teaching Assistant, University of New Mexico Field School, Chaco Canyon National Park, Professors W.H. Wills and Patricia Crown *May-June 2012; September-November 2013; August-October 2014*
 - Responsibilities include teaching total station and geophysical mapping, assisting in excavations, surveys, and lab analysis, grading field notes, giving presentation on remote sensing and geophysical survey, tutoring students, assisting in field camp management
- Guest Lecturer and Ground-Penetrating Radar Workshop, Anthropology Graduate Student Union (AGSU) Conference, Albuquerque, New Mexico *April 20, 2013*
 - Title of Lecture: "Geophysical Applications in Archaeology"
- Teaching Assistant, Anthropology 101 Online Course, Professor Osjborn Pearson, University of New Mexico *Spring Semester 2012*
 - Responsibilities include generating and moderating discussion questions, grading papers and online responses, tutoring students
- Teaching Assistant, Ground-Penetrating Radar annual course, Professor Lawrence Conyers, University of Denver, *May 2005, 2006, 2007, 2008, 2009*
 - Responsibilities include assisting with lecture, aiding in field collection of data and working with equipment, assisting with computer processing and theoretical concepts

- Guest Lecturer and Ground-Penetrating Radar Demonstration, Forensic Anthropology course (Anthropology 2710), Professor Catherine Gaither, Metropolitan State College of Denver, *September 2007*
- Graduate Teaching Assistant, Global Perspectives course (Anthropology 1010), Professor Lawrence Conyers, University of Denver, *Autumn Quarter 2005*
 - Responsibilities included grading papers and exams, moderating online discussions, teaching labs, tutoring students
- Graduate Teaching Assistant, Human Nature course (Anthropology 2105), Professor Dean Saitta, University of Denver, *Spring Quarter 2005*
 - Responsibilities included grading papers and exams, teaching labs, moderating in-class discussion, tutoring students
- Teaching Assistant, Physical Geology course (Geology 1010), Professor Mike Kerwin, University of Denver, *Spring Quarter 2004*
 - Responsibilities included grading exams and labs, setting up and preparing labs, assisting teaching labs, tutoring students

PUBLICATIONS (PEER-REVIEWED)

Sturm, J.O.

In press. A Remote Sensing Approach to Studying Land Use Change in Chaco Canyon, New Mexico. In *Archaeological Remote Sensing in North America: Anthropological Applications Using Innovative Technologies*. Edited by D.P. McKinnon and B.S. Haley, chapter 5. University of Alabama Press, Tuscaloosa.

Wills, W.H., D.W. Love, S.J. Smith, K.R. Adams, M.R. Palacios-Fest, W.B. Dorshow, B. Murphy, **J.O. Sturm**, H. Mattson, and P.L. Crown

2016 Water Management at Pueblo Bonito: Evidence from the National Geographic Society Trenches. *American Antiquity* 8(3): 449-470.

Sturm, J.O.

2016 Using Ground-Penetrating Radar to Re-evaluate the Chetro Ketl Field Area in Chaco Canyon, New Mexico. *Journal of Archaeological Science: Reports* 7: 238-246.

Zhang, S., C.D. Lippitt, S.M. Bogus, A.C. Loerch, and **J.O. Sturm**

2015. The accuracy of aerial triangulation products automatically generated from hyper-spatial resolution digital aerial photography. *Remote Sensing Letters* 7(2): 160-169.

Sturm, J. O. and P. L. Crown

2015 Micro-scale Mapping Using Ground-Penetrating Radar: An Example From Room 28, Pueblo Bonito, Chaco Canyon, New Mexico. *Advances in Archaeological Practice* 3(2): 124-135.

Ortman, S. G., A. H. F. Cabaniss, **J. O. Sturm** and L. M. Bettencourt

2015 Settlement Scaling and Increasing Returns in an Ancient Society. *Science Advances*. DOI: 10.1126/sciadv.1400066

VanValkenburgh, P., C. P. Walker, and **J. O. Sturm**

2014 Gradiometer and Ground-Penetrating Radar Survey of two *Reducción* Settlements in the Zaña Valley, Peru. *Archaeological Prospection*. DOI: 10.1002/arp.1499

Ortman, S. G., A. H. F. Cabaniss, **J. O. Sturm** and L. M. Bettencourt

2014 The Pre-History of Urban Scaling. *Plos One* 9(2):e87902. DOI: 87910.81371/journal.pone.0087902.

Liebmann, M., C.P. Walker and **J.O. Sturm**

2013 Mapping Archaeological Sites Using an Unmanned Aerial Vehicle. *Newsletter of the New Mexico Archaeological Council*, 2013-1: 8-10.

Sturm, J.O.

2008 Geophysical Investigations at the San Jacinto Battleground State Historic Site: Approaching Large-Scale Evaluation of Historic Sites and Public Use Areas. *Bulletin of the Texas Archaeological Society*, 79 (2008): 147-157.

TECHNICAL REPORTS

Sturm, J.O.

2017 Report on Ground-Penetrating Radar Surveys at Kozlowski's Trading Post, Pecos National Historical Park, New Mexico. Submitted to the Office of Contract Archaeology, University of New Mexico. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2017 Report on Ground-Penetrating Radar Surveys at Pottery Mound (LA 416), Isleta Pueblo, New Mexico. Submitted to Isleta Pueblo. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2017 Report on Ground-Penetrating Radar Surveys at Montezuma Well National Monument, Arizona. Submitted to National Park Service, Montezuma Well National Monument. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2016 Report on Ground-Penetrating Radar Surveys at Wagon Massacre Site, Ft. Bowie National Historic Site, Arizona. Submitted to National Park Service, Southeast Arizona Group and Fort Bowie National Historical Site. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2015 Report on Ground-Penetrating Radar Surveys at Butterfield Station, Fort Bowie, Arizona. Submitted to National Park Service, Southeast Arizona Group and Fort Bowie National Historical Site. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2015 Report on Ground-Penetrating Radar Surveys at Feature 25, LA37470, White Sands Missile Range, New Mexico. Submitted to Office of Contract Archaeology, University of New Mexico. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2014 Report on Follow-up Ground-Penetrating Radar Surveys for the Luce Bayou/Site 41LB42 Paleogully Project, Dayton, Texas. Submitted to Moore Archaeological Consulting, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2013 Report on Ground-Penetrating Radar Surveys for the Convento/Mission Church, Isleta Pueblo, New Mexico. Submitted to Isleta Pueblo. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2013 Report on Ground-Penetrating Radar Surveys for the Luce Bayou/Site 41LB42 Project, Dayton, Texas. Submitted to Moore Archaeological Consulting, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Walker, C.P. and **J.O. Sturm**

2013 Ground-Penetrating Radar Void Survey of Portions of Segments 5 and 7 of the WEP III Pipeline. Submitted to HRL Compliance Solutions, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico and Archaeo-Geophysical Associates, Austin, Texas.

Sturm, J.O.

2012 Report on Ground-Penetrating Radar Survey: NASA Goddard Space Flight Center Dinosaur Tracks, Greenbelt, Maryland. Submitted to Goddard Space Flight Center. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2012 Report on Ground-Penetrating Radar Surveys: Pigeon's Ranch and Kozlowski's Ranch, Pecos National Historical Park, New Mexico. Submitted to Aspen CRM Solutions. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Walker, C.P. and **J.O. Sturm**

2012 Geophysical Survey of Prehistoric Trackways, Lake Otero, White Sands, New Mexico. Submitted to EPG, Inc. Report on file at Archaeo-Geophysical Associates, Austin, Texas.

Sturm, J.O. and C.P. Walker

2011 Report and Assessment of Geophysical Surveys for Burial and Cemetery Location on Betio Island, Tarawa atoll, Republic of Kiribati. Submitted to History Flight, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2011 Report on Ground-Penetrating Radar Surveys: CDOT I-25 Expansion Project, Pueblo, Colorado. Submitted to Centennial Archaeology. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Walker, C.P. and **J.O. Sturm**

2011 Report on Geophysical Surveys at LA61, Pojoaque Pueblo, New Mexico. Submitted to Museum of Santa Fe. Report on file at Archaeo-Geophysical Associates, Austin, Texas.

Sturm, J.O.

2010 Report on Ground-Penetrating Radar Surveys: Pinion Park, Nevada Mental Health Institute, Sparks, Nevada. SPWB Project No: 07-C20 NNAMHS Cemetery Improvements. Submitted to Nevada State Public Works Board. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2010 Report on Ground-Penetrating Radar Surveys: NNAMHS Cemetery Fencing Project, Sparks, Nevada. SPWB Project No: 07-C20 NNAMHS Cemetery Improvements. Submitted to Nevada State Public Works Board. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2010 Report on Ground-Penetrating Radar Survey: San Miguel Chapel, Santa Fe, New Mexico. Submitted to Cornerstones Community Partnerships and Jemez Mountains Research Center. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2010 Ground-Penetrating Radar Surveys at the Gordion Archaeological Site, Turkey. Submitted to Compton Tucker, Goddard Space Center. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2010 Report on Ground-Penetrating Radar Surveys Method Investigation: Honolulu High-Capacity Transit Corridor Project (HHCTCP). Submitted to Cultural Surveys Hawaii, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and C.P. Walker

2010 Geophysical Surveys for the Ruby Pipeline Project, Goose Lake, Lake County, Oregon. Submitted to EPG, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2009 Report on Ground-Penetrating Radar Survey: 2105 Goodrich, Austin, Texas. Submitted to Scott Turner. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2009 Report on Ground-Penetrating Radar Survey: Camp Floyd State Park Cemetery, Fairfield, Utah. Submitted to Camp Floyd State Park and Stagecoach Inn Museum. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Walker, C.P. and J.O. Sturm

2009 Geophysical Surveys for the Hickman/New Dora Cemetery Association, North Little Rock, Arkansas. Report on file at Archaeo-Geophysical Associates, Austin, Texas.

Sturm, J.O.

2009 Report on Ground-Penetrating Radar Surveys: Nevada Mental Health Institute, Sparks, Nevada. Submitted to Nevada State Public Works Board. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2008 Report on Ground-Penetrating Radar Survey: San Gregorio de Abo, Salinas Pueblo Missions National Monument, New Mexico. Submitted to E2M Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2008 Report on Ground-Penetrating Radar Survey: Chaco Dump Site, Chaco Culture National Historical Park, New Mexico. Submitted to Chaco Culture National Historical Park. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2008 Report on Ground-Penetrating Radar Surveys: Colorado History Museum Relocation, 12th and Broadway, Denver, Colorado. Submitted to RMC Consulting, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2008 Report on Magnetometry Surveys: Sunland Park Sports Complex (LA98733), Sunland Park, New Mexico. Submitted to TRC Solutions. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2008 Report on Ground-Penetrating Radar Survey: Creede Cemetery, Creede, Colorado. Submitted to Mineral County Commissioner. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Surveys: San Jacinto Battleground, Deer Park, Texas. Submitted to Friends of the San Jacinto Battleground and Texas Parks and Wildlife. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Synthesis and Summary of Geophysical Surveys: San Jacinto Battleground, Deer Park, Texas. Submitted to Friends of the San Jacinto Battleground and Texas Parks and Wildlife. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2007 Report on Ground-Penetrating Radar Surveys: Marian Hall, Santa Fe, New Mexico. Submitted to Zia Engineering and Environmental Consultants. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Survey: Prairie Ridge Cemetery, Stoneham, Colorado. Submitted to Galen Headley.

Sturm, J.O., S. Lowry, L.B. Conyers

2007 Report on Ground-Penetrating Radar Survey: Brooklyn Town Site, Baldwin City, Kansas. Submitted to URS Corporation. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Conyers, L.B. and **J.O. Sturm**

2007 Report on Ground-Penetrating Radar Survey: ITT Building Floor, Loveland, Colorado. Submitted to Merch Motors USA. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Survey: Los Alamos National Laboratory, TA-21 Area A, Los Alamos, New Mexico. Submitted to Los Alamos National Laboratory. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Survey: Vail Parking Structure, Vail, Colorado. Submitted to Town of Vail Public Works Department. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Survey: Storm Sewer Pipe Location, Vail, Colorado. Submitted to Town of Vail Public Works Department. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Surveys: Private Ranch, Santa Fe, New Mexico. Submitted to Scott Lindquist. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2007 Report on Ground-Penetrating Radar Surveys: Virginia City Cemeteries, Virginia City, Nevada. Phases 1 and 2. Submitted to Comstock Historic Cemetery Commission. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2007 Report on Ground-Penetrating Radar Survey: Old Dutch Church, Kingston, New York. Submitted to Atkinson-Noland & Associates, Inc. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2007 Report on Ground-Penetrating Radar Survey: Captain Tom Dam, Farmington, New Mexico. Submitted to Archaeological Consulting Services. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2006 Report on Ground-Penetrating Radar Surveys: St. Francis de Assisi Church, Santa Fe, New Mexico. Submitted to Zia Engineering and Environmental Consultants. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O., M. Grealy, L.B. Conyers

2006 Report on Ground-Penetrating Radar Surveys: Canton Lake Cemetery, Canton Lake, Oklahoma. Submitted to E2M Co. and the U.S. Bureau of Reclamation. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O., M. Grealy, L.B. Conyers

2006 Report on Ground-Penetrating Radar Survey: Los Lunas Hospital and Training School Cemetery, Los Lunas, New Mexico. Submitted to Marcey Davis. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2005 Report on Ground-Penetrating Radar Survey: Fort St. Vrain, Colorado. Submitted to Colorado Historical Society. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O., S. Gale, L.B. Conyers

2005 Report on Ground-Penetrating Radar Survey: Lewis and Clark Campsite, The Dalles, Oregon. Phases 1 and 2. Submitted to Columbia Gorge Discovery Center & Museum. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O., M. Grealy, L.B. Conyers

2005 Report on Ground-Penetrating Radar Survey: Canyon Land Development Hotel Site Mapping Project, Page, Arizona. Submitted to Western Mapping Company. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Conyers L.B., M. Grealy, K. Safi, **J.O. Sturm**

2005 Report on Ground-Penetrating Radar Survey: Goodnight Barn, Pueblo, Colorado. Submitted to Cuartelejo HP Associates, Pueblo County, and Colorado State University. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O.

2005 Report on Ground-Penetrating Radar Survey: San Ysidro Cemetery, Corrales, New Mexico. Submitted to San Ysidro Parish. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O., S. Gale, S. Moore, L.B. Conyers

2004 Report on Ground-Penetrating Radar Survey: Arrastra Mill Site, Clear Creek, Colorado. Submitted to Clear Creek County Open Space. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Conyers L.B., **J.O. Sturm**, K. Safi

2004 Report on Ground-Penetrating Radar Data and Results from Aztec, New Mexico. Submitted to Museum of Natural History, University of Colorado. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Gale S., **J.O. Sturm**, L.B. Conyers

2004 Report on Ground-Penetrating Radar Survey at Brighton Cemetery, Brighton, Colorado. Submitted to Neal Nahler. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Gale S., M. Grealy, M. Koons, **J.O. Sturm**, L.B. Conyers

2004 Report on Electromagnetic and Ground-Penetrating Radar Surveys at Fort Sill Golf Course, Oklahoma. Submitted to E2M Co. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Grealy M., **J.O. Sturm**, J. Conyers, L.B. Conyers

2004 Report on Ground-Penetrating Radar Data: Las Vegas Medical Center, Las Vegas, New Mexico. Submitted to Las Vegas Medical Center. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

Sturm, J.O. and L.B. Conyers

2003 Report on Ground-Penetrating Radar Surveys: Fort Garland, Colorado. Submitted to Ft. Garland Museum. Report on file at TAG Research by Sturm, Inc. Albuquerque, New Mexico.

PROFESSIONAL CONFERENCE PRESENTATIONS

- 82nd Annual Meeting for the Society of American Archaeology, Vancouver, BC *March 29-April 2, 2017*

Jennie O. Sturm

Presentation: "Recent Advancements in Remote Sensing Studies in Chaco Canyon."

- Computer Applications in Archaeology Annual Conference, Atlanta, Georgia *March 14-16, 2017*

Jennie O. Sturm

Presentation: "Ground-Penetrating Radar in Chaco Canyon, New Mexico: 40 Years of Mapping Chaco's Buried Past."

Invited Panelist Discussant: "Women in CAA."

- 81st Annual Meeting for the Society for American Archaeology, Orlando, Florida *April 6-10, 2016*

Jennie O. Sturm

Presentation: "Using Ground-Penetrating Radar to Re-evaluate the Chetro Ketl Field Complex in Chaco Canyon, New Mexico."

- 15th Biennial Southwest Symposium, Tucson, Arizona *January 14-16, 2016*

Michael Aiuvalasit, Christopher Kiahtipes, Josh Farella, **Jennie O. Sturm**, Christopher Roos

Poster Presentation: "Reconstructing the Use-Life of an Ancestral Puebloan Water Reservoir Feature, Amoxiumqua (LA481), Jemez Mountains, New Mexico."

- 80th Annual Meeting for the Society for American Archaeology, San Francisco, California *April 15-19, 2015*

Jennie O. Sturm

Poster Presentation: "Understanding Archaeological Complexity Using Ground-Penetrating Radar: Examples from the American Southwest."

Lauren O'Brien and **Jennie O. Sturm**

Poster Presentation: "Exploring Pithouses: Using GPR to Identify and Map Taos Valley Sites."

- Society for Historical Archaeology 2015 Conference, Seattle, Washington *January 7-11, 2015*

Emily Lena Jones, Caroline Gabe, **Jennie O. Sturm**, Samuel Sisneros

Poster Presentation: "Searching for the Plaza Vieja: Historical Archaeology and Ground-Penetrating Radar in Belen, New Mexico."

- 5th International Conference on Remote Sensing in Archaeology, Duke University, North Carolina *October 12-15, 2014*

Jennie O. Sturm

Presentation: "Using Ground-Penetrating Radar to Study Sites in the American Southwest: New Approaches to an Old Method."

- 79th Annual Meeting for the Society for American Archaeology, Austin, Texas *April 23-27, 2014*

Chester P. Walker and **Jennie O. Sturm**

Presentation: "Using Geophysics for the Archaeological Study and Management of Historic Cemeteries."

Jennie O. Sturm

Presentation: "Increasing the Effectiveness of GPR Mapping for Unmarked Burials: A Processing and Analysis Approach."

- 76th Annual Meeting for the Society for American Archaeology, Sacramento, California *March 30-April 3, 2011*

Michele L. Koons and **Jennie O. Sturm**

Poster Presentation: "Ground-Penetrating Radar Investigations at Licapa II, Peru."

- Society for Historical Archaeology 2011 Conference, Austin, Texas *January 5-9, 2011*

Jennie O. Sturm

Presentation: "Using Ground-Penetrating Radar to Study a Historic Denver Neighborhood."

Session chair: "High Tech Archaeologies and Reconstructing the Past."

Jennie O. Sturm and Chester P. Walker

Presentation (invited as part of Technology Room): "Ground-Penetrating Radar and Magnetometry for Historic Archaeological Mapping."

- 75th Annual Meeting for the Society for American Archaeology, St. Louis, Missouri, *April 14-18, 2010*

Jennie O. Sturm

Presentation: "Using Ground-Penetrating Radar to Study a Historic Denver Neighborhood."

- Colorado Council for Professional Archaeologists, Montrose, Colorado *March 25-28, 2010*

Jennie O. Sturm

Presentation: "Ground-Penetrating Radar Investigations at the New History Colorado Center Site."

- Society for Historical Archaeology 2010 Conference, Amelia Island, Florida, *January 6-9, 2010*
Jennie O. Sturm and Chester P. Walker
Poster Presentation: "Using Geophysics to Study Historic Cemeteries in the Southeast."
- Society for Historical Archaeology 2008 Conference, Albuquerque, New Mexico, *January 8-13, 2008*
Jennie O. Sturm
Presentation: "Using Ground-Penetrating Radar to Study Historic Sites in the U.S."
- 72nd Annual Meeting for the Society for American Archaeology, Austin, Texas, *April 25-29, 2007*
Jennie O. Sturm and Lawrence B. Conyers
Presentation: "Ground-Penetrating Radar for Urban Archaeological Mapping."
- 71st Annual Meeting for the Society for American Archaeology, San Juan, Puerto Rico, *April 26-30, 2006*
Jennie O. Sturm
Poster Presentation: "Using Ground-Penetrating Radar to Study a 16th Century Colonial Church and Associated Town in Northern Peru."
- Colorado Council for Professional Archaeologists, Estes Park, Colorado *March 31-April 1, 2006*
Jennie O. Sturm
Presentation: "Mapping Archaeological Features Using Ground-Penetrating Radar: Examples from Colorado."

PROFESSIONAL MEMBERSHIPS

- Society for American Archaeology
- International Society for Archaeological Prospection
- Computer Applications in Archaeology
- American Society for Photogrammetry and Remote Sensing

GEOPHYSICAL PROJECT EXPERIENCE-CONTRACT

- Office of Contract Archaeology, University of New Mexico, Pecos National Historical Park, New Mexico *August 2017*
 - GPR surveys to map possible features behind trading post
- Isleta Pueblo, Isleta, New Mexico *April 2016-May 2017*
 - GPR surveys to map extent of site prior to stabilization efforts
- National Park Service, Montezuma Well National Monument, Arizona *April 2017*
 - GPR workshop and training; GPR surveys to map previously excavated pit houses
- National Park Service, Southeast Arizona Group, Ft Bowie National Historical Site, Arizona *August 2016*
 - GPR surveys to test for burned wagon remains at Wagon Massacre Site, Ft. Bowie
- Scott Byram Consulting, Monterey Presidio, Monterey, California *August 2016*
 - GPR surveys to map stratigraphy in sinkhole area
- National Park Service, Southeast Arizona Group, Ft Bowie National Historical Site, Arizona *June 2015*
 - GPR surveys to test for architecture at Butterfield Station, Ft. Bowie
- Office of Contract Archaeology, University of New Mexico, LA37470, White Sands Missile Range, New Mexico *January 2015*
 - GPR surveys to test for buried roomblocks at Jornada Mogollon site
- Moore Archaeological Consulting/Coastal Water Authority, Dayton, Texas *May 2014*
 - GPR surveys to map geological features in water pipeline right-of-way

- Enterprise/HRL Environmental, WEP III, Roswell/Hobbs, New Mexico *November 2013*
 - GPR surveys to map bedrock voids in pipeline right-of-way
- Isleta Pueblo, Isleta, New Mexico *August 2013*
 - GPR survey to map features associated with historic mission church at Isleta Pueblo
- Moore Archaeological Consulting/Coastal Water Authority, Dayton, Texas *March-May 2013*
 - GPR surveys to map archaeological features in water pipeline right-of-way
- NASA/Goddard Space Flight Center, Greenbelt, Maryland *October 2012*
 - GPR surveys to map bedrock layer associated with Cretaceous age dinosaur footprints
- Archaeo-Geophysical Associates, LLC., White Sands National Monument, National Park Service, Alamogordo, New Mexico *August 2012*
 - GPR and EM surveys to map Pleistocene megafauna footprints within monument
- Geophysical Inc., Eden Memorial Park, Burbank, California *June-September 2012*
 - Monitoring GPR surveys to locate unmarked burials
- National Park Service, Pecos National Historical Park, New Mexico *January 2012*
 - GPR surveys to map unmarked burials from Battle of Glorieta
- Centennial Archaeology, Inc., CDOT I-25 expansion project, Pueblo, Colorado *September 2011*
 - GPR surveys to map historic buildings and structures at two sites
- Archaeo-Geophysical Associates, LLC., Pojoaque Pueblo, New Mexico *March 2011*
 - GPR, Magnetometry, EM, and Resistivity surveys to map historic and prehistoric features at Pueblo
- Cultural Surveys Hawaii, Honolulu, Hawaii *November 2010*
 - GPR surveys to assess mapping potential in urban areas for Honolulu transit project
- New South Associates, Stanton House, Women's Rights National Historical Park, New York *October 2010*
 - Magnetometry, EM, and GPR surveys to map historic features associated with Stanton Historic House
- Nevada Mental Health Institute Cemetery, Sparks, Nevada *September 2010*
 - GPR survey to map unmarked burials in known cemetery
- Nevada Mental Health Institute Cemetery, Sparks, Nevada *June 2010*
 - GPR survey to locate possible unmarked burials in perimeter of cemetery
- Cornerstones Inc., San Miguel Chapel, Santa Fe, New Mexico *April 2010*
 - GPR surveys to map possible burials and historic trench
- Nevada Mental Health Institute Cemetery, Sparks, Nevada *March 2010*
 - GPR survey to locate possible unmarked burials in park area
- EPG, Inc., Ruby Pipeline Project, Goose Lake, Lakeview, Oregon *December 2009*
 - GPR and magnetometry surveys to prospect for potential sites within part of pipeline right-of-way
- Turner Residential, Austin, Texas *October 2009*
 - GPR survey to prospect for possible unmarked burials on residential property
- Camp Floyd State Park, Fairfield, Utah *September 2009*
 - GPR survey to locate unmarked burials in historic cemetery
- Hickman/New Dora Cemetery, Little Rock, Arkansas *June 2009*
 - GPR survey to locate unmarked burials in historic cemetery
- NASA Goddard Space Flight Center, Greenbelt, Maryland *June 2009*
 - GPR training in field collection and data processing
 - Data processing, analysis, and report generation from project in Turkey
- Archaeo-Geophysical Associates, LLC., Columbus, New Mexico *May 2009*
 - GPR survey to prospect for buried architecture at Mimbres site
- Nevada Mental Health Institute Cemetery, Sparks, Nevada *April 2009*
 - GPR surveys to locate unmarked burials in historic cemetery

- Colorado History Museum, Colorado Historic Society, Denver, Colorado *November 2008*
 - GPR survey to prospect for buried house foundations beneath parking lot for Colorado History Museum relocation
- Creede Cemetery, Creede, Colorado *November 2008*
 - GPR surveys to locate unmarked burials in and around historic cemetery
- E2M Inc., Salinas Pueblo Missions National Monument, New Mexico *October 2008*
 - GPR surveys to locate buried architecture beneath Abo Spanish Mission
- Chaco Canyon National Historical Park, New Mexico *August 2008*
 - GPR survey to locate buried trenches at historic dump site
- TRC Solutions, El Paso, Texas *July-August 2008*
 - Magnetometry survey to locate historic and prehistoric sites in Sunland Park, New Mexico.
 - GPS/GIS data collection and analysis
- Archaeo-Geophysical Associates, LLC. *April 2008*
 - Processing and analysis of GPR data from cemeteries in east Texas
- Archaeological Consulting Services, Tempe, Arizona *November 2007 and December 2007*
 - GPR survey on Navajo Reservation to prospect for unmarked burial
- Town of Vail, Vail, Colorado *July 2007 and September 2007*
 - GPR survey to locate buried pipes in parking garage
- Atkinson-Noland Associates, Boulder, Colorado *September 2007*
 - GPR survey of cemetery at Old Dutch Church, Kingston, New York
 - GPR survey of walls of Old Dutch Church for structural integrity analysis
- Merch Motors USA, Longmont, Colorado *June 2007*
 - GPR survey of cement thickness and I-beam structure
- Comstock Cemetery Commission, Virginia City, Nevada *May 2007 and July 2007*
 - Two-phase GPR survey to map unmarked burials in several historic cemeteries
- URS Corporation, Denver, Colorado *May 2007*
 - GPR survey to prospect for buried remains of Brooklyn Town Site, Baldwin City, Kansas
- Los Alamos National Laboratory, Los Alamos, New Mexico *May 2007*
 - GPR survey of buried nuclear waste tankards
 - Conducting training workshops with GPR equipment and software
- Stoneham Cemetery, Stoneham, Colorado *April 2007*
 - GPR survey to prospect for unmarked burial
- Santa Fe, New Mexico *February 2007*
 - GPR survey to prospect for historic acequia
- Zia Engineering and Environmental Consultants, llc., Albuquerque, New Mexico *March 2006-March 2007*
 - Processing and analyzing geophysical data, including gradiometer and GPR data
 - GIS mapping
 - GPR surveys in Santa Fe, New Mexico, prospecting for various historic features
- Friends of San Jacinto Battleground, Houston, Texas *November-December 2006*
 - GPR and magnetometry survey of historic battleground
 - Processing and analysis of geophysical data
- E2M Inc. and Geophysical Inc., Canton Lake Cemetery, Oklahoma *May 2006*
 - GPR survey to locate burials and historic features outside current reinternment cemetery
- Ft. Bayard Historic Cemetery, Ft. Bayard, New Mexico *May 2006*
 - GPR survey to confirm placement of burials in Ft. Bayard Historic Cemetery
- Los Lunas Training School and Hospital Cemetery, Los Lunas, New Mexico *May 2006*
 - GPR survey to locate unmarked burials in Los Lunas Training School and Hospital Cemetery
- Geophysical Inc., Brighton Cemetery, Brighton, Colorado *May 2006*
 - GPR survey to locate unmarked burials outside current cemetery

- Geophysical Inc., St. Francis Church, Santa Fe, New Mexico *March 2006*
 - GPR survey to locate buried walls, foundations, middens, and burials associated with 1850s church
- San Ysidro Cemetery Association, Corrales, New Mexico *October 2005*
 - GPR survey to locate unmarked burials in current church cemetery
- Geophysical Inc., Santa Fe, New Mexico *June 2005*
 - GPR survey to locate kivas and roomblocks beneath parking lot in downtown area
- Goodnight Barn, Pueblo, Colorado *June 2005*
 - GPR survey to locate silos and outhouse associated with Goodnight Barn
- Geophysical Inc., Westminster, Colorado *May 2005*
 - GPR survey to locate buried house foundation and privy beneath parking lot and nearby fields
- The Dalles, Oregon *March 2005, September 2005*
 - GPR survey to locate historic features associated with a Lewis and Clark campsite
- Canyon Land Development Project, near Lake Powell, Utah *March 2005*
 - GPR survey to map bedrock under sand dunes
- Fort St. Vrain, Colorado *January 2005*
 - GPR survey to locate buried architecture of fur trading post
- Geophysical Inc., Santa Fe, New Mexico *November 2004*
 - GPR survey to locate Spanish colonial church beneath parking lot near St. Francis Cathedral
- Fort Sill Golf Course, Fort Sill, Oklahoma *November 2004*
 - GPR survey to map remnants of Civil War-era campsite, possibly belonging to General Custer
- Geophysical Inc., Las Vegas Medical Center, Las Vegas, New Mexico *July 2004*
 - GPR survey to locate unmarked burials in areas outside cemeteries
- Geophysical Inc., Fort Garland, Colorado *August 2003*
 - GPR survey to locate buried foundation and walls of Civil War bunkhouse

GEOPHYSICAL PROJECT EXPERIENCE-SERVICE, COLLABORATIVE, & PRO BONO

- Center for Advanced Spatial Technologies (CAST)/University of Arkansas, As-Safah Site, Oman *January 2017*
 - GPR and magnetometry surveys to map features and artifacts associated with Iron Age production site. Part of SPARC award, Michael Harrower, Johns Hopkins University
- University of New Mexico/Bruce Huckell, Hartley Mammoth Site, Chama, New Mexico *July 2016*
 - GPR surveys to map stratigraphy surrounding mammoth burial
- Denver Museum of Nature and Science, LA69124, Gila, New Mexico *March 2015*
 - GPR surveys to test for pit houses at Mogollon site
- University of New Mexico/Emily Jones and Samuel Sisneros, Belen, New Mexico *July 2014*
 - GPR surveys to map Spanish Colonial church and Plaza Vieja in Belen
- Southern Methodist University/Lauren O'Brien, Taos, New Mexico *June 2014*
 - GPR surveys to map known and potential pit houses near LA260
- Albuquerque Open Space, Matthew Schmader, Piedras Marcadas, Albuquerque, New Mexico *October 2013*
 - GPR surveys to map features and architecture associated with pueblo
- Office of Contract Archaeology, University of New Mexico, Alex Kurota, El Chamisal Pueblo, Los Ranchos de Albuquerque, New Mexico *August 2012*
 - GPR surveys to map architecture associated with prehistoric pueblo
- History Flight, Inc., Tarawa atoll, Republic of Kiribati *February 2011*
 - Geophysical and GPS mapping to locate U.S. WWII burials

- Harvard University/Michele Koons and Nathaniel Van Valkenburgh, Licapa II and Zana, Peru *May-June 2010*
 - GPR surveys to map Moche structures and Spanish colonial features
- Archaeo-Geophysical Associates, LLC., Etowah Indian Mounds State Historic Site, Georgia *June 2009*
 - GPR survey to prospect for buried features at mound site
- Archaeo-Geophysical Associates, LLC., Castalian Springs, Tennessee *June 2009*
 - GPR survey to prospect for buried features at mound site
- University of Central Florida/Sarah Barber, Rio Viejo, Mexico *May 2008*
 - GPR surveys to locate plazas and room units at Classic-age site
- San Lazaro Pueblo, New Mexico *April 2005*
 - GPR survey to locate buried features in plaza area and pueblo room blocks, Pueblo IV period
- Geophysical Inc., Brighton Cemetery, Brighton, Colorado *October 2004*
 - GPR survey to locate unmarked burials in area outside cemetery
- Sara Gale, High Cave, Canyonlands, Utah *October 2004*
 - GPR survey to locate habitation layers and possible architecture in rock shelter
- Geophysical Inc., Arrastra Mill, Idaho Springs, Colorado *September 2004*
 - GPR survey to locate features associated with arrastra mill and mining site
- University of Colorado, Steve Lekson, Aztec, New Mexico *August 2004*
 - GPR survey to locate buried kiva and associated room blocks, Pueblo III period
- Geophysical Inc., Bomb Shelter, Polo Grounds, Denver, Colorado *March 2004*
 - GPR survey to locate possible bomb shelter beneath tennis court at a private home
- Geophysical Inc., Bradford House, Colorado *January 2004*
 - GPR survey to locate buried stables and barn
- Palmer Lake, Colorado (Undergraduate Honors Thesis) *January 2004*
 - GPR survey to map buried sediments and stratigraphy of frozen lake
- University of Denver, Four-Mile Historic Park, Denver, Colorado *December 2003*
 - GPR survey to locate buried foundation and walls of family house
- University of Pennsylvania, Matthew Liebmann, Jemez Springs, New Mexico *August 2003*
 - GPR survey to locate buried kivas, Pueblo III period

AWARDS AND HONORS

- Hibben Senior Grant, University of New Mexico, *August 2017-May 2018*
- National Science Foundation Doctoral Dissertation Improvement Grant (Award ID: 1649264) with Dr. W.H. Wills, *November 2016*
- Graduate Research Assistantship, Department of Geography, University of New Mexico, *January 2015-present*
- Student Research Grant, GPSA, University of New Mexico, *April 2015*
- American Society for Photogrammetry and Remote Sensing- Rocky Mountain Region Doctoral Award, *January 2015*
- Graduate Research Assistantship, Department of Anthropology, University of New Mexico, *August 2012-May 2014*
- Graduate Fellow, Santa Fe Institute, *September-December 2011*
- Graduate Research Assistantship, University of Denver *2004-2006*
- Partners in Scholarship (PINS) research award, University of Denver *May 2003*
- Thomas A. Bogard Scholarship, Department of Anthropology, University of Denver *May 2003*
 - Awarded to one senior in Anthropology
- International Service and Research (ISR) Fellowship, University of Denver *June 2002*
- International Service and Research (ISR) Fellowship, University of Denver *December 2002*
- Dean's List and Hornbeck Scholar, University of Denver *2000-2004*

FIELD SCHOOL

University of New Mexico, Profs. W.H. Wills and Patricia Crown, *June-July 2003*

- Cañada de Cochiti,, NM: Excavation methods, including equipment use, grid establishment, artifact cataloging and field conservation, data collection and recording, artifact and excavation field analyses, stratigraphy and soil analyses, photography.
- El Malpaís, NM: Surveying methods, including map reading and analysis, remote sensing, transecting, use of compass, Global Positioning System (GPS), site recording and data collection.
- Professional methods, including proper application of paperwork, working in team settings, ethical practices.

OTHER PROFESSIONAL SERVICE

- Vice President, American Society for Photogrammetry and Remote Sensing, University of New Mexico Chapter *August 2016-Present*
- Reviewer, *Advances in Archaeological Practice* (2015)
- Reviewer, *Archaeological Prospection* (2012, 2013, 2014)
- Reviewer, *Archaeology in Oceania* (2013, 2014)
- President, Lambda Alpha National Honor Society in Anthropology, Gamma of Colorado, University of Denver *May 2005-May 2006*
- Vice President, Lambda Alpha National Honor Society in Anthropology, Gamma of Colorado, University of Denver *May 2004-May 2005*
- Anthropology Representative, Graduate Students of the Four Faculties, University of Denver *2005-2006*
 - Graduate student run organization designed to promote conference attendance and address graduate student's needs in the arts, humanities, and the social, natural, and computer sciences.

COMMUNITY ACTIVITIES & VOLUNTEER WORK

- Alvarado Elementary School: Science Fair Judge, *April 2012, 2013*
- Alvarado Elementary School: Career Day Participant, *November 2011, 2012*