SCOTT J. BRANDENBERG, Ph.D., P.E.
Professor of Civil and Environmental Engineering
Associate Dean for Diversity and Inclusion
University of California
Los Angeles, CA 90095
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EDUCATION

Ph.D. Civil Engineering. University of California, Davis. December 2005. Dissertation: Behavior of pile foundations in liquefied and laterally spreading ground during centrifuge tests. Advisors: Dr. Ross W. Boulanger and Dr. Bruce L. Kutter.

M.S. Civil Engineering, University of California, Davis, CA. December 2002.

B.S. Civil Engineering, California Polytechnic State University, San Luis Obispo, CA. June 2000.

PROFESSIONAL EXPERIENCE

Associate Dean for Diversity and Inclusion, UCLA Henry Samueli School of Engineering and Applied Science, 11/17 – present.

Professor, UCLA Dept. of Civil and Environmental Eng., 07/17 – present.

Associate Professor, UCLA Dept. of Civil and Environmental Eng., 07/11 – 07/17.

Assistant Professor, UCLA Dept. of Civil and Environmental Eng., 01/06 – 06/11.

Graduate Student Researcher, UC Davis, 08/00 – 12/05

LICENSURE

Professional Engineer, Certificate No. C85225

PROFESSIONAL SERVICE

Editor, ASCE Journal of Geotechnical and Geoenvironmental Engineering (03/16 – present).

Chair – ASCE Geo-Institute Earthquake Engineering and Soil Dynamics Technical Committee (06/18 – present)

Associate Editor, ASCE Journal of Geotechnical and Geoenvironmental Engineering, 01/12 – 03/16.

Vice Chair – ASCE Geo-Institute Earthquake Engineering and Soil Dynamics Committee, 03/15 – 06/18 (member since 03/08).

Organizing Committee Member, 5th Geotechnical Earthquake Engineering and Soil Dynamics Conference

Organizing Committee Member, 2013 GeoCongress.

Chair, EERI Student Activities Committee, 06/12 – 07/15.

Board Member, ASCE Los Angeles Section Geotechnical Group, 09/06 – 09/12.

Member – EERI Student Activities Committee, 06/08 – 07/15.

Member – ASCE Geo-Institute Embankments, Dams and Slopes Committee, 07/12 – 01/15

Co-leader of GEER reconnaissance team following 2010 El Mayor - Cucapah earthquake, and December 11 Los Angeles flow slides, and member of GEER reconnaissance team following 2007 Niigata Chuetsu-Oki Earthquake.

Paper Reviews: Journal of Geotechnical and Geoenvironmental Engineering, Geotechnique, Canadian Geotechnical Journal, Earthquake Spectra, Geotechnical Testing Journal.

Proposal Review Panels: National Science Foundation, USGS NEHRP

UNIVERSITY SERVICE

Associate Dean for Diversity and Inclusion, Henry Samueli School of Engineering and Applied Science, 11/17 – present.

Chair, ABET Executive Committee, Henry Samueli School of Engineering and Applied Science, 07/15 – present.

Faculty Advisor, ASCE CalGeo Student Chapter, 09/08 - present.

Vice Chair, Department of Civil and Environmental Engineering, 07/11 – 07/16.

Chair, Planning Committee, Department of Civil and Environmental Engineering, 07/15-07/17.

Chair, Faculty Executive Committee, Henry Samueli School of Engineering and Applied Science, 07/13 – 07/15

Faculty Advisor, ASCE Chi Epsilon Student Chapter, 09/09 – 06/11.

Faculty Advisor, ASCE UCLA Student Chapter, 09/06 – 09/08.

Faculty Advisor, EERI UCLA Student Chapter, 01/06 – 09/06.

HONORS

2018 Faculty Member of the Year Award, UCLA ASCE Student Chapter

2015 Walter L. Huber Civil Engineering Research Prize

2013 Shamsher Prakash Research Award

2012 Outstanding Professor Award for ASCE Student Chapter

2010 Arthur Casagrande Professional Development Award

2008 Outstanding Faculty Advisor Award for ASCE Student Chapter

2007 Outstanding Faculty Advisor Award for ASCE Student Chapter

2004 UC Davis prize for excellence in geotechnical engineering

2000 California Geotechnical Engineers Association scholarship

PUBLICATIONS

Journal Papers

43. Afacan, K.B., Yniesta, S., Shafiee, A., Stewart, J.P., and Brandenberg, S.J. (201x). "Total Stress Analysis of Soft Clay Ground Response in Centrifuge Models." Journal of Geotechnical and Geoenvironmental Engineering. Accepted March 27, 2019.

42. Esmaeilzadeh, E., Agapaki, E., Pitilakis, D., Brandenberg, S.J., Stewart, J.P., and Taciroglu, E. (201x). "Data Paper: Centrifuge Testing of Circular and Rectangular Embedded Structures with Base Excitations." Earthquake Spectra. Accepted February 25, 2019.

41. Zimmaro, P., Stewart, J.P., Brandenberg, S.J., Kwak, D.Y., and Jongejan, R. (201x). "Multi-hazard system reliability of flood control levees." Soil Dynamics and Earthquake Engineering. Accepted April 25, 2018.

40. Eslami, M.M., Pradel, D., and Brandenberg, S.J. (2018). "Experimental mapping of elastoplastic surfaces for sand using undrained perturbations." Soils and Foundations. 58(1), 160-171.

39. Yniesta, S., Brandenberg, S.J. and Shafiee, A. (2017). "ARCS: A one dimensional nonlinear soil model for ground response analysis." Soil Dynamics and Earthquake Engineering. 102, 75-85

38. Zimmaro, P., Kwak, D., Stewart, J.P., Brandenberg, S.J., Balakrishnan, A., Jongejan, R., Ausilio, E., Dente, G., Xie, J., and Mikami, A. (2017). "Procedures from international guidelines for assessing seismic risk to flood control levees." *Earthquake Spectra*, In Press.

37. Brandenberg, S.J., Mylonakis, G., and Stewart, J. (2017). "Approximate solution for seismic earth pressures on rigid walls retaining inhomogeneous elastic soil." *Soil Dynamics and Earthquake Engineering*, 97, 468-477.

36. Rathje, E.M., Dawson, C., Padgett, J.E., Pinelli, J.-P., Stanzione, D., Adair, A., Arduino, P., Brandenberg, S.J., Cockeril, T., Esteva, M., Haan, F.L. Jr., Hanlon, M., Kareem, A., Lowes, L., Mock, S., and Mosqueda, G.. (2017). "DesignSafe: A new cyberinfrastructure for natural hazards engineering." *Natural Hazards Review*, 18(3).

35. Cappa, R., Brandenberg, S.J., and Lemnitzer, A. (2017). “Strains and pore pressures generated during cyclic loading of embankments on organic soil.” *Journal of Geotechnical and Geoenvironmental Engineering*, 143(9).

34. Brandenberg, S.J. (2017). “iConsol.js: Javascript implicit finite difference code for nonlinear consolidation and secondary compression.” *International Journal of Geomechanics*, 17(6)

33. Shafiee, A., Stewart, J.P., Venugopal, R., and Brandenberg, S.J. (2017). “Adaptation of Broadband Simple Shear Device for Constant Volume and Stress-Controlled Testing.” *Geotechnical Testing Journal*, 40(1), 15-28

32. Yniesta, S., and Brandenberg, S.J. (2017) “Stress-Ratio-Based Interpretation of Modulus Reduction and Damping Curves.” *Journal of Geotechnical and Geoenvironmental Engineering*, 143(1), 06016021.

31. Deverel, S.J., Bachand, S., Brandenberg, S.J., Jones, C.E., Stewart, J.P., and Zimmaro, P. (2016). “Factors and processes affecting Delta levee system vulnerability.” *San Francisco Estuary and Watershed Science*, 14(4).

30. Kwak, D., Stewart, J.P., Brandenberg, S.J., and Mikami, A. (2016) “Seismic Levee System Fragility Considering Spatial Correlation of Demands and Component Fragilities.” *Earthquake Spectra*, 32(4), 2207-2228.

29. Turner, B.J., Brandenberg, S.J., and Stewart, J.P. (2016). “Case Study of Parallel Bridges Affected by Liquefaction and Lateral Spreading.” *Journal of Geotechnical and Geoenvironmental Engineering*, 142(7).

28. Lemnitzer, A., Cappa, R., Yniesta, S., and Brandenberg, S.J. (2016) “Centrifuge Testing of Model Levees atop Peaty Soil: Experimental Data.” *Earthquake Spectra*, 32(3), 1903-1924

27. Turner, B.J, and Brandenberg, S.J. (2015) “Pile Pinning and Interaction of Adjacent Foundations During Lateral Spreading.” *Deep Foundations Institute*, 9(2), 92-102.

26. Yniesta, S., Lemnitzer, A., Cappa, R., and Brandenberg, S.J. (2015) "Vacuum Pluviation Device for Saturating Sand." *Geotechnical Testing Journal*, 38(3), 355-360.

25. Kwak, D., Stewart, J.P., Brandenberg, S.J., and Mikami, A. (2015). "Characterization of Seismic Levee Fragility using Field Performance Data" *Earthquake Spectra*, 32(1), 193-215.

24. Kwak, D.Y., Brandenberg, S.J., Mikami, A., and Stewart, J.P. (2015) "Prediction Equations for Estimating Shear Wave Velocity from Combined Geotechnical and Geomorphic Indices based on Japanese Data Set." *Bulletin of the Seismological Society of America*, 105(4), 1919-1930

23. Shafiee, A., Stewart, J.P., and Brandenberg, S.J. (2015) "Reset of Secondary Compression Clock for Peat by Cyclic Straining." *Journal of Geotechnical and Geoenvironmental Engineering*, 141(3), 02815001.

22. Brandenberg, S.J., Mylonakis, G., and Stewart, J.P. (2015) "Kinematic framework for evaluating seismic earth pressures on retaining walls." *Journal of Geotechnical and Geoenvironmental Engineering*, 141(7).

21. Choi, J.-I., Kim, M.M., and Brandenberg, S.J. (2015). "A p-y Plasticity Model for Seismic Analysis of Pile Foundations in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, 10.1061/(ASCE)GT.1943-5606.0001261, 04015013.

20. Reinert, E., Stewart, J.P., Moss, R.E.S., and Brandenberg, S.J. (2014). "Dynamic Response of a Model Levee on Sherman Island Peat: A Curated Data Set." *Earthquake Spectra*, 30(2), 639-656.

19. Afacan, K.B., Brandenberg, S.J., and Stewart, J.P. (2014). "Centrifuge Modeling Studies of the Response of Soft Clay over Wide Strain Range." *Journal of Geotechnical and Geoenvironmental Engineering*, 140(2), 04013003.

18. Wang, R., and Brandenberg, S.J. (2013). "Beam on Nonlinear Winkler Foundation and Modified Neutral Plane Solution for Calculating Downdrag Settlement.", *Journal of Geotechnical and Geoenvironmental Engineering*, 139(9), 1433-1442.

17. Brandenberg, S.J., Zhao, M., Boulanger, R.W., and Wilson, D.W. (2013). "p-y Plasticity Model for Nonlinear Dynamic Analysis of Piles in Liquefiable Soil", *Journal of Geotechnical and Geoenvironmental Engineering*, 139(8), 1262-1274.

16. Brandenberg, S.J., Zhao, M., and Kashighandi, P. (2013). "Analysis of Three Bridges that Exhibited Various Performance Levels in Liquefied and Laterally Spreading Ground", *Journal of Geotechnical and Geoenvironmental Engineering*, 139(7), 1035-1048.

15. Chang, D., Boulanger, R.W., Kutter, B.L., and Brandenberg, S.J. (2013). "FEM Analysis of Dynamic Soil-Pile-Structure Interaction in Liquefied and Laterally Spreading Ground" *Earthquake Spectra*, 23(3), 733-755.

14. Coe, J. and Brandenberg, S.J. (2012). "CPT-based Ultrasonic Probe for P-wave Reflection Imaging of Embedded Objects." *Journal of Bridge Engineering*, 17(6), 940-950.

13. Brandenberg, S.J., Kashighandi, P., Zhang, J., Huo, Y., and Zhao, M. (2011). "Fragility Functions for Bridges in Liquefaction-Induced Lateral Spreads." *Earthquake Spectra*, 27(3), 683-717.

12. Brandenberg, S.J., Kashighandi, P. (2011). "Influence of underlying weak soil on passive earth pressure in cohesionless deposits." *Journal of Geotechnical and Geoenvironmental Engineering*, 137(3), 273-278.

11. Coe, J., and Brandenberg, S.J. (2010). "P-wave reflection imaging of submerged soil models using ultrasound." *Journal of Geotechnical and Geoenvironmental Engineering*, 136(10), 1358-1367.

10. Brandenberg, S.J., Bellana, N., and Shantz, T. (2010). "Shear wave velocity as function of standard penetration test resistance and vertical effective stress at California bridge sites." *Soil Dynamics and Earthquake Engineering*, 30(10), 1026-1035.

9. Brandenberg, S.J., Wilson, D.W., and Rashid, M.M. (2010). "A Weighted Residual Numerical Differentiation Algorithm Applied to Experimental Bending Moment Data." *Journal of Geotechnical and Geoenvironmental Engineering*, 136(6), 854-863.

8. Kayen, R. , Brandenberg, S.J., Collins, B.D., Dickenson, S, Ashford, S., Kawamata, Y., Tanaka, Y., Koumoto, H., Yashinsky, M., Abrahamson, N., and Tokimatsu, K. (2009). "Niigata-Chuetsu Oki Earthquake of July 16, 2007: Geotechnical and Seismological Aspects." *Earthquake Spectra*, EERI, 25(4), 777-802.

7. Brandenberg, S.J., Coe, J., Nigbor, R.L., and Tanksley, K. (2009) "Different Approaches for Measuring Ground Strains During Pile Driving at a Buried Archeological Site." *Journal of Geotechnical and Geoenvironmental Engineering*, 135(8), 1101-1112.

6. Zhang, J., Huo, Y., Brandenberg, S.J., and Kashighandi, P. (2008). "Effects of Structural Characterizations on Fragility Functions of Bridges Subject to Seismic Shaking and Lateral Spreading." *Earthquake Engineering and Engineering Vibrations*. 7(4):369-382.

5. Brandenberg, S.J., Kutter, B.L., and Wilson, D.W. (2008). "Fast Stacking and Phase Corrections of Shear Wave Signals in a Noisy Environment ." *Journal of Geotechnical and Geoenvironmental Engineering*, 134(8). 1154-1165.

4. Bian, Y., Hutchinson, T., Wilson, D.W., Laefer, D., and Brandenberg, S.J. (2008). "Experimental investigation of grouted helical piers for use in foundation rehabilitation." *Journal of Geotechnical and Geoenvironmental Engineering*, 134(9). 1280-1289.

3. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2007). "Static pushover analyses of pile groups in liquefied and laterally spreading ground in centrifuge tests." *Journal of Geotechnical and Geoenvironmental Engineering*, 133(9), 1055-1066.

2. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2007). "Liquefaction-induced softening of load transfer between pile groups and laterally spreading crusts." *Journal of Geotechnical and Geoenvironmental Engineering*, 133(1), 91-103.

1. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2005). "Behavior of pile foundations in laterally spreading ground during centrifuge tests." *Journal of Geotechnical and Geoenvironmental Engineering*, 131(11), 1378-1391.

Journal Discussions and Closures

2. Brandenberg, S.J., Mylonakis, G., and Stewart, J.P. (2016). "Closure to 'Kinematic framework for evaluating seismic earth pressures on retaining walls.' by Scott J. Brandenberg, George Mylonakis, and Jonathan P. Stewart." Journal of Geotechnical and Geoenvironmental Engineering, 142(8), 07016014-1.

1. Brandenberg, S.J., Boulanger, R.W., and Kutter, B.L. (2005). "Discussion of 'Single piles in lateral spreads: field bending moment evaluation.'" *J. Geotech. Geoenviron. Eng.,* ASCE, Vol. 131(4), 529-531

Conference and Workshop Papers

64. Brandenberg, S.J., Kwak, D.Y., Zimmaro, P., Bozorgnia, Y., Kramer, S., and Stewart, J.P. (2018). "Next-generation liquefaction (NGL) case history database structure."5th Conference on Geotechnical Earthquake Engineering and Soil Dynamics.

63. Eslami, M., Brandenberg, S.J., and Stewart, J.P. (2018). "Cyclic behavior of low-plasticity fine-grained soils with varying pore fluid salinity."5th Conference on Geotechnical Earthquake Engineering and Soil Dynamics

62. Eslami, M., Zhong, A., and Brandenberg, S.J. (2018). "Processing, visualization, and analysis of direct simple shear test data using Jupyter notebooks in the DesignSafe cyberinfrastructure."5th Conference on Geotechnical Earthquake Engineering and Soil Dynamics

61. Zimmaro, P., Stewart, J.P., Brandenberg, S.J., Kwak, D.Y., and Jongejan, R. (2017). "System Reliability of Flood Control Levees."3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering, Paper No. 432

60. Lemnitzer, A., Cappa, R., Yniesta, S., Stewart, J.P., and Brandenberg, S.J. (2017). "Post-Cyclic Settlements of a Levee Structure on Organic Soil during Centrifuge

Testing."3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering, Paper No. 431

59. Tsai, T.-Y., Brandenberg, S.J., Kayen, R.E., Stewart, J.P., Mikami, A., and Sato, T. (2017). "Estimating ground motions from past earthquakes for levees founded on soft soils."3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering, Paper No. 412

58. Kwak, D.Y., Ancheta, T.D., Mitra, D., Ahdi, S.K., Zimmaro, P., Parker, G.A., Brandenberg, S.J., and Stewart, J.P. (2017). "Performance evaluation of VSZ-to-VS30 correlation methods using global VS profile database."3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering, Paper No. 399

57. Yniesta, S., and Brandenberg, S.J. (2017). "Influence of Misfit of Desired Damping Response in Nonlinear Ground Response Analysis."3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering, Paper No. 384

56. Tsai, Y.-T., Brandenberg, S.J., Kayen, R.E., Mikami, A., Sato, T., and Stewart, J.P. (2017). "Dataset for Empirical Assessment of Seismic Performance for Levees Founded on Peaty Organic Soils." Geo-Risk, ASCE, GSP 284, 11-21

55. Kwak, D.Y., Jongejan, R., Zimmaro, P., Brandenberg, S.J., and Stewart, J.P. (2017). "Influence of wall flexibility on seismic earth pressures in vertically homogeneous soil." Geo-Risk, ASCE, GSP 283, 140-150

54. Brandenberg, S.J., Stewart, J.P., and Mylonakis, G. (2017). "Influence of wall flexibility on seismic earth pressures in vertically homogeneous soil." Geo-Risk,, ASCE, GSP 285, 412-423.

53. Brandenberg, S.J., Agapaki, E., Mylonakis, G., and Stewart, J.P. (2017). "Seismic earth pressures exerted on rigid walls by vertically heterogeneous soil using Winkler method." Proc. 16th World Conference on Earthquake Engineering. Santiago, Chile.52. Esteva, M., Brandenberg, S.J., Eslami, M.M., Adair, A., and Kulasekaran, S.A. (2016). "Modelling Natural Hazards Engineering Data to Cyberinfrastructure." SciDataCon, 2016, Advancing the Frontiers of Data in Research

51. Agapaki, E., Esmaeilzadeh Seylabi, E., Brandenberg, S.J., Stewart, J.P., Taciroglu, E., and Pitilakis, D. (2016). "Centrifuge modeling of culvert structures to evaluate seismic earth pressures arising from soil-structure interaction." Proc. 1st International Conference on Natural Hazards & Infrastructure. Chania, Greece.

50. Yniesta, S., and Brandenberg, S.J. (2015). "Unloading-Reloading Rule for Nonlinear Site Response Analysis." *Proc. 6th International Conference on Earthquake Geotechnical Engineering*. Christchurch, New Zealand. Paper No. 127.

49. Turner, B.J., Brandenberg, S.J., and Stewart, J.P. (2015). "Influence of kinematic SSI on Foundation Input Motions for Pile-Supported bridges." *Proc. 6th International Conference on Earthquake Geotechnical Engineering*. Christchurch, New Zealand. Paper No. 97.

48. Cappa, R., Yniesta, S., Brandenberg, S.J., and Lemnitzer, A. (2015). "Settlements and excess pore pressure generation in peaty soils under embankments during

cyclic loading." *Proc. 6th International Conference on Earthquake Geotechnical Engineering*. Christchurch, New Zealand. Paper No. 685.

47. Yniesta, S., Cappa, R., Lemnitzer, A., and Brandenberg, S.J. (2015). "Centrifuge Testing of Levees: Saturation Techniques during Model Construction." Proc. IFCEE 2015, pp. 1197-1206, American Society of Civil Engineers, Iskander, M., Suleiman, M.T., Anderson, J.B., and Laefer, D.F. Eds.

46. Cappa, R., Yniesta, S., Lemnitzer, A., Brandenberg, S., and Shafiee, A. (2015). "Settlement Estimations of Peat during Centrifuge Experiments." Proc. IFCEE 2015, pp. 152-160, American Society of Civil Engineers, Iskander, M., Suleiman, M.T., Anderson, J.B., and Laefer, D.F. Eds.

45. Turner, B.J., Brandenberg, S.J., and Stewart, J.P. (2015). "Analysis if Drilled Shaft Settlement Caused by Liquefaction." Proc. IFCEE 2015, pp. 1176-1188, American Society of Civil Engineers, Iskander, M., Suleiman, M.T., Anderson, J.B., and Laefer, D.F. Eds.

44. Cappa, R., Yniesta, S., Lemnitzer, A., Brandenberg, S.J., and Stewart, J.P. (2014). "Centrifuge Experiments to Evaluate the Seismic Performance of Levees on Peaty Soils in the Sacramento-San Joaquin Delta."Proc. Association of State Dam Safety Officials Annual Conference, Dam Safety 2014, Association of State Dam Safety Officials Annual Conference, 1: 423-432.

43. Turner, B.J., Brandenberg, S.J., and Stewart, J.P. (2014). "Comparison of design procedures and observed performance of bridges subjected to lateral spreading." Proc. 10th National Conf. in Earthquake Eng., Earthquake Engineering Research Institute, Anchorage, AK, J. Mitrani-Reiser and F. Zareian (eds.), Paper No. 776 (electronic file).

42. Kwak, D.Y., Brandenberg, S.J., Mikami, A., Balakrishnan, A., and Stewart, J.P. (2014). "Applicability of levee fragility functions developed from Japanese data to California's Central Valley," Proc. 34th Annual USSD Conf., United States Society on Dams, San Francisco, CA, Daniel L. Wade (ed.), 1131-1144.

41. Choi, J.-I., Brandenberg, S.J., and Kim, M.M. (2013). "Modeling the dynamic behavior of a single pile in dry sand using a new p-y material model." Proceedings Vancouver Geotechnical Society Symposium, Vancouver, British Columbia, Canada.

40. Reinert, E.T., Lemke, J., Stewart, J.P., and Brandenberg, S.J. (2013). "Remote monitoring of a model levee constructed on soft peaty organic soil." Proceedings GeoCongress 2013, San Diego.

39. Shafiee, A., Brandenberg, S.J., and Stewart, J.P. (2013). "Laboratory investigation of the pre- and post-cyclic volume change properties of Sherman Island peat." Proceedings GeoCongress 2013, San Diego.

38. Reinert, E.T., Brandenberg, S.J., and Stewart, J.P. (2013). "Measurements of translational and rotational dynamic stiffness for a model levee on peat." Proceedings 10th International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan.

37. Turner, B., Brandenberg, S.J., Stewart, J.P. (2013). "Evaluation of collapse and non-collapse of parallel bridges affected by liquefaction and lateral spreading." Proceedings 10th International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan.

36. Kwak, D.Y., Brandenberg, S.J., Stewart, J.P., and Mikami, A. (2012). "Groundwater Estimation for Evaluation of Seismically-Induced Levee Performance." 15th World Conference on Earthquake Engineering, Lisbon, Portugal.

35. Reinert, E.T., Brandenberg, S.J., Stewart, J.P., and Moss, R.E.S. (2012). "Dynamic Field Test of a Model Levee Founded on Peaty Organic Soil Using an Eccentric Mass Shaker." 15th World Conference on Earthquake Engineering, Lisbon, Portugal.

34. Kwok, DY, A Mikami, SJ Brandenberg, and JP Stewart (2011). "Ground motion estimation for evaluation of levee performance in past earthquakes," Proc. 9th International Conf. on Urban Earthquake Engin./4th Asia Conf. on Earthquake Eng.,, Center for Urban Earthquake Engineering, March 6-8, 2012, Tokyo Institute of Technology, Tokyo, Japan.

33. Coe, J., and Brandenberg, S.J. (2011). "P-wave reflection imaging ofa cast-in-steel-shell bridge foundation." Geo-Frontiers 2011: Advances in Geotechnical Engineering, Proceedings of the Geo-Frontiers 2011 Conference, March 13-16, 2011, Dallas, TX.

32. Coe, J., and Brandenberg, S.J. (2010). "P-wave reflection imaging of laboratory soil models." Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I.M. Idriss. May 24-29, San Diego, CA.

31. Kashighandi, P., and Brandenberg, S.J. (2010). "Application of concave up p-y elements in static analysis of piles in laterally spreading ground." Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I.M. Idriss. May 24-29, San Diego, CA.

30. Ashford, S.A., Boulanger, R.W., Brandenberg, S.J., and Shantz, T. (2009). "Overview of recommended analysis procedures for pile foundations in laterally spreading ground." TCLEE 2009 Conference: 7th International Conference on Lifeline Earthquake Engineering. Oakland, CA.

29. Brandenberg, S.J., and Kashighandi, P., (2009). "Performance-based earthquake engineering applied to a bridge in liquefied and laterally spreading ground." Improving Earthquake Mitigation through Innovations and Applications in Seismic Science, Engineering, Communication, and Response: A US - Iran Workshop. Irvine, CA.

28. Zhao, M., and Brandenberg, S.J. (2009). "Numerical study of passive load transfer softening due to underlying soft soil." International Foundation Congress & Equipment Expo. March 2009.

27. Kashighandi, P., Brandenberg, S.J., Zhang, J., Huo, Y. and Zhao, M., "Fragility of old-vintage continuous California bridges to liquefaction and lateral spreading", 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.

26. Zhang, J., Huo, Y., Brandenberg, S.J. and Kashighandi, P., "Fragility Functions of Different Bridge Types Subject to Seismic Shaking and Lateral Spreading", 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.

25. Chu, D., Brandenberg, S.J., and Lin, P.S., "Performance of bridges in liquefied ground during 1999 Chi-Chi earthquake", 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.

24. Zhang, J., Huo, Y., Kashighandi, P., and Brandenberg, S.J. (2008). "Effects of structural characterization on fragility functions of bridges subjected to seismic shaking and lateral spreading." Sixth National Seismic Conference on Bridges and Highways, Charleston, SC, July.

23. Brandenberg, S.J. (2008). "Imaging a grouted column in a centrifuge model using shear wave velocity tomography." Proc. 4th Conf. Geotechnical Earthquake Engineering and Soil Dynamics, Geotechnical Special Publication No. 181.

22. Brandenberg, S.J., Kashighandi, P., Zhang, J., Huo, Y., and Zhao, M. (2008). "Sensitivity study of an older-vintage bridge subjected to lateral spreading." Proc. 4th Conf. Geotechnical Earthquake Engineering and Soil Dynamics, Geotechnical Special Publication No. 181.

21. Kashighandi, P., and Brandenberg, S.J. (2007) "Fragility curves for lateral spreading-induced damage to the Landing Road Bridge", 4th International Conference on Urban Earthquake Engineering. Center for Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan.

20. Boulanger, R. W., Chang, D., Brandenberg, S. J., Armstrong, R. J., and Kutter, B. L. (2007). "Seismic design of pile foundations for liquefaction effects." Earthquake Geotechnical Engineering, 4th International Conference on Earthquake Geotechnical Engineering – Invited Lectures, K. D. Pitilakis, ed., Springer, The Netherlands, 277-302.

19. Bian, Y., Hutchinson, T.C., Wilson, D.W., Laefer, D., and Brandenberg, S.J. (2007). "Experimental investigation of grouted helical piers for use in foundation rehabilitation." Proceedings, 4th International Conference on Earthquake Geotechnical Engineering, K. D. Pitilakis, ed., Springer, The Netherlands.

18. Brandenberg, S.J., Choi, S., Kutter, B.L., Wilson, D.W., and Santamarina, J.C. (2006). "A bender element system for measuring shear wave velocities in centrifuge models" , 6th International Conference on Physical Modeling in Geotechnics, Hong Kong, 1:165 - 170 (August 2006).

17. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2006). "Monotonic and cyclic pushover analyses of pile foundations in laterally spreading ground." *8th U.S. National Conference on Earthquake Engineering*, San Francisco, Paper No. 8NCEE-001480.

16. Gebman, M., Brandenberg, S.J., Cheng, L., Chang, D., Lee, W., Pi, M., Ugalde, J., and Ashford, S. (2006). "Promoting undergraduate interest in earthquake engineering and seismic design through a shake table competition." *8th U.S. National Conference on Earthquake Engineering*, San Francisco, Paper No. 8NCEE-001007.

15. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2005). "Observations and analysis of pile groups in liquefied and laterally spreading ground in centrifuge tests." Seismic Performance and Simulation of Pile Foundations in Liquefied and Laterally Spreading Ground, Geotechnical Special Publication No. 145, ASCE, 161-172.

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9. Brandenberg, S.J., Bellana, N., and Shantz, T., 2010. Shear Wave Velocity as a Statistical Function of Standard Penetration Test Resistance and Vertical Effective Stress at Caltrans Bridge Sites. 75pg.

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Invited Presentations (does not include presentations of conference papers)

47. Turner, B.J., Brandenberg, S.J., and Stewart, J.P. (2016). “Influence of kinematic soil-structure interaction on pile foundation input motions for bridge seismic design.” *GeoCongress*, Phoenix, AZ, February 17, 2016.

46. Yniesta, S., and Brandenberg, S.J. (2016). “Constitutive modeling of peat in dynamic simulations of levees.” *GeoCongress*, Phoenix, AZ, February 17, 2016.

45. Ahdi, S., Brandenberg, S.J., and Turner, B.J. (2016). “Constraining Rayleigh wave dispersion curve inversion using penetration resistance measurements.” *GeoCongress*, Phoenix, AZ, February 15, 2016.

44. Brandenberg, S.J., Stewart, J.P., and Turner, J.P. (2016). “Influence of kinematic SSI on foundation input motions for deep foundations.” Pacific Earthquake Engineering Research Center Annual Meeting, Berkeley, CA. January 28, 2016.

43. Brandenberg, S.J., Eslami, M., Esteva, M., and Moreira, W. (2016). “Example use case: Data sharing and re-use.” DesignSafe-ci User Requirements Workshop. University of Texas, Austin. January 12, 2016.

42. Brandenberg, S.J. (2016). “Seismic earth pressures on retaining walls.” University of California, Davis. Invited Seminar. January 8, 2016.

41. Brandenberg, S.J. (2015). “Seismic stability of levees.” University of California, Irvine. Invited Seminar. October 16th, 2015.

40. Brandenberg, S.J. (2014). "Pile foundations in liquefied and laterally spreading ground: Guidelines and case histories." American Council of Engineering Companies of New York, Syracuse, NY, May 6th, 2014.

39. Brandenberg, S.J. (2014). "Seismic stability of levees resting atop peat soil." Southern California Water Committee, 2nd Quarterly Meeting, Montclair, CA, April 25th, 2014.

38. Brandenberg, S.J. (2014). "Pile foundations in liquefied and laterally spreading ground: Guidelines and case histories." Deep Foundations Institute, Practical Deep Foundation Design and Construction for Seismic and Lateral Loads. Seattle, WA, April 22nd, 2014.

37. Brandenberg, S.J. (2014). "State of the art and practice in earthquake induced soil liquefaction: breakout session D on earth structures and soil-structure interaction." National Academies Liquefaction Workshop, Tempe, AZ, March 11th, 2014.

36. Brandenberg, S.J., Stewart, J.P., Schmutte, C., and Lemnitzer, A. (2014). "NEES/EERI Research-to-Practice Webinar: Seismic stability of levees resting atop peat soil." February 5th, 2014.

35. Brandenberg, S.J., and Stewart, J.P. (2013). "Seismic performance of levees founded on non-organic and organic soils in California and Japan." Delta Stewardship Council, Sacramento, CA, July 10th, 2013.

34. Brandenberg, S.J. (2013). “Recommended design practice for pile foundations in laterally spreading ground.” Vancouver Geotechnical Society Symposium, Vancouver, British Columbia, Canada, June 7th, 2013. Invited Keynote lecture.

33. Brandenberg, S.J. (2013). "Seismic stability of levees on peat soil." UCLA Tech Forum, Los Angeles, CA, May 8, 2013.

32. Brandenberg, S.J. (2013). "Influence of lateral spreading on deep foundations." Advances in Geotechnical Earthquake Engineering Seminar, Oregon State University, Corvallis, OR, March 23rd, 2013.

31. Brandenberg, S.J., Reinert, E.T., and Stewart, J.P. (2013). “Seismic stability of levees on peat soils.” 10th International Conference on Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan, March 2nd, 2013.

30. Brandenberg, S.J. (2012). “Dynamic response of levees founded on peats and organic soils.” Pacific Earthquake Engineering Research Center Annual Meeting, October 26, 2012.

29. Brandenberg, S.J. (2012). “Shaking the Delta levees.” ASCE Los Angeles Section Hydraulics Group, October 11, 2012.

28. Brandenberg, S.J. (2011). "Dynamic Behavior of Levees on Very Soft Peaty Organic Soil in the Sacramento-San Joaquin Delta". Inland Empire Geotechnical Group Meeting, Rancho Cucamonga, October 26, 2011.

27. Brandenberg, S.J., and Stewart, J.P. (2011). "Field Testing of Levees on Peaty Organic Soil". Informational Hearing on Water Reliability and Seismic Risk, Metropolitan Water District, Los Angeles, October 19, 2011.

26. Brandenberg, S.J., Zhang, J., Huo, Y., and Zhao, M. (2011). "Macro-Elements for Soil-Pile Interaction in Liquefied Soil". PEER Annual Meeting, Berkeley, CA., October 1, 2011

25. Brandenberg, S.J., (2011). "Evaluation of Bridges that Performed Well, Moderately, and Poorly in Lateral Spreads". PEER Annual Meeting, Berkeley, CA., October 1, 2011

24. Brandenberg, S.J., (2010) "Deep foundations in liquefied and laterally spreading ground", ASCE San Diego Section Geotechnical Group meeting, (11/23/2010). Invited speaker.

23. Brandenberg, S.J., Zhang, J., Kashighandi, P., Huo, Y., and Zhao, M. (2010). "Fragility Functions for Bridges in Liquefied and Laterally Spreading Ground." 2010 Quake Summit and joint annual meetings of the Pacific Earthquake Engineering Research Center and the George E. Brown Network for Earthquake Engineering Simulation, October 8, 2010.

22. Brandenberg, S.J. (2010). "El Mayor Cucapah Earthquake of April 4th 2010." Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I.M. Idriss., May 29, 2010.

21. Brandenberg, S.J.(2010). "Deep Foundations in Liquefied and Laterally Spreading Ground." California Polytechnic State University, San Luis Obispo, Geotechnical Earthquake Engineering Course, May 24, 2010.

20. Brandenberg, S.J.(2010). "Imaging Embedded Objects using Elastic Waves" California Polytechnic State University, San Luis Obispo, Society of Civil Engineers, May 24, 2010.

19. Brandenberg, S.J., and Zhang, J. (2009). "Simulation of 3-D Global Bridge Response to Shaking and Lateral Spreading." PEER Transportation research Program Coordination Meeting, August 25, 2009.

18. Brandenberg, S.J., and Kashighandi, P., (2009). "Performance-based earthquake engineering applied to a bridge in liquefied and laterally spreading ground." Improving Earthquake Mitigation through Innovations and Applications in Seismic Science, Engineering, Communication, and Response: A US - Iran Workshop.

17. Brandenberg, S.J. and Zhang, J. (2008). "Simulation of 3-D Global Bridge Response to Shaking and Lateral Spreading." PEER Transportation Systems Research Program Kickoff Meeting, December 10, 2008.

16. Brandenberg, S.J. (2008). "Imaging a grouted column in a centrifuge model using shear wave velocity tomography." Proc. 4th Conf. Geotechnical Earthquake Engineering and Soil Dynamics, Geotechnical Special Publication No. 181.

15. Brandenberg, S.J., Kashighandi, P., Zhang, J., Huo, Y., and Zhao, M. (2008). "Sensitivity study of an older-vintage bridge subjected to lateral spreading." Proc. 4th Conf. Geotechnical Earthquake Engineering and Soil Dynamics, Geotechnical Special Publication No. 181.

14. Kashighandi, P., and Brandenberg, S.J. (2007) "Fragility curves for lateral spreading-induced damage to the Landing Road Bridge", 4th International Conference on Urban Earthquake Engineering. Center for Urban Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan.

13. Brandenberg, S.J., Choi, S., Kutter, B.L., Wilson, D.W., and Santamarina, J.C. (2006). "A bender element system for measuring shear wave velocities in centrifuge models" , 6th International Conference on Physical Modeling in Geotechnics, Hong Kong.

12. Brandenberg, S.J. (2006). "Centrifuge modeling, interpretation, and analysis of pile groups in liquefied and laterally spreading ground." *ASCE Los Angeles Geotechnical Group*, Los Angeles, CA, January 18 meeting.

11. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2006). "Monotonic and cyclic pushover analyses of pile foundations in laterally spreading ground." *8th U.S. National Conference on Earthquake Engineering*, San Francisco, Paper No. 8NCEE-001480.

10. Gebman, M., Brandenberg, S.J., Cheng, L., Chang, D., Lee, W., Pi, M., Ugalde, J., and Ashford, S. (2006). "Promoting undergraduate interest in earthquake engineering and seismic design through a shake table competition." *8th U.S. National Conference on Earthquake Engineering*, San Francisco, Paper No. 8NCEE-001007.

9. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. (2006). "Monotonic and cyclic pushover analyses of pile foundations in laterally spreading ground." *8th U.S. National Conference on Earthquake Engineering*, San Francisco, Paper No. 8NCEE-001007.

8. Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., Wilson, D.W., and Chang, D. (2004). "Load transfer between pile groups and laterally spreading ground during earthquakes." *13th World Conference on Earthquake Engineering*, Vancouver, Canada, paper No. 1516.

7. Brandenberg, S.J. (2004). "Behavior of pile foundations in liquefied and laterally spreading ground in centrifuge tests." *Seminar for I.M. Idriss UC Davis Award for Excellence in Geotechnical Engineering*. Davis, CA, June 9, 2004.

6. Brandenberg, S.J. (2003). "Centrifuge modeling of pile groups in liquefied and laterally spreading ground." *Student seminar at PEER Testbeds meeting*. Richmond, CA, October, 2003.

5. Brandenberg, S.J. and Idriss, I.M. (2002). "An overview of the great Alaska earthquake of 1964." *Proc. U.S.-Japan Seminar on Seismic Disaster Mitigation in Urban Area by Geotechnical Engineering*, Anchorage, AK, June 26-27, 2002.

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3. Brandenberg, S.J. (2002). "Behavior of pile groups in laterally spreading ground during earthquakes." *Seminar at Geomatrix Consultants*. Oakland, CA, January 8, 2002.

2. Brandenberg, S.J. and Singh, P. (2001). "Behavior of pile foundations in laterally spreading ground during earthquakes." *Seminar for undergraduate PEER scholars*. Davis, CA. September, 2001.

1. Brandenberg, S.J., Singh, P., Boulanger, R.W., and Kutter, B.L. (2001). "Behavior of piles in laterally spreading ground during earthquakes." *Proc. Sixth Caltrans Seismic Research Workshop*, 2-106.

Articles

1. Brandenberg, S.J., Stewart, J.P., and Moss, R.E.S. (2010). “Characterizing the Seismic Threat to California’s Water Supply.” GeoStrata, March/April, 36-39.

Curated Data Sets

24. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 1A - 1m radius centrifuge experiment on virgin peat with surcharge", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D32V2C96M

23. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 2B - 1m radius centrifuge experiment on peat sieved thorugh # 4 openings with surcharge", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3TD9N80K

22. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 3C - 1m radius centrifuge experiment on shredded peat with surcharge", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3PN8XF79

21. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 4D - 1m radius centrifuge experiment on peat sieved thorugh # 4 openings without surcharge - First stage", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3JW86N3J

20. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 5D - 1m radius centrifuge experiment on peat sieved thorugh # 4 openings without surcharge - Second stage", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3F47GT8M

19. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 6D - 1m radius centrifuge experiment on the behavior of a sandy levee on top of a peat layer under ground motion - Third stage", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D39C6S14W

18. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Jonathan Stewart, Scott Brandenberg (2014). "TEST 7E - 1m radius centrifuge experiment on sandy levee behavior under ground motions: building the model off the arm and using a sand-clay mix", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D35M62704

17. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 8F - 1m radius centrifuge experiment for evaluation of consolidation of the peat under a sand layer", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D31V5BD6C

16. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 9F - 1m radius centrifuge experiment for evaluation of the response of a carved sandy levee on top of peat under ground motions - Second stage", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3X63B55H

15. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2014). "TEST 10G - 1m radius centrifuge experiment on sandy levee behavior under ground motions: employing CO2 and building model on the arm", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3Z31NP21

14. Riccardo Cappa, Samuel Yniesta, Anne Lemnitzer, Jonathan Stewart, Scott Brandenberg (2015). "TEST 11H - 1m radius centrifuge experiment on clayey levee behavior under ground motions: double drainage solution", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3G73748K

13. Riccardo Cappa, Samuel Yniesta, Scott Brandenberg, Jonathan Stewart, Anne Lemnitzer (2014). "TEST 12L - RCK01 : Part 1 - 9m radius centrifuge experiment on clayey levee behavior under ground motions", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D34M91B6S

12. Riccardo Cappa, Samuel Yniesta, Scott Brandenberg, Jonathan Stewart, Anne Lemnitzer (2014). "TEST 13L - RCK01 : Part 2 - 9m radius centrifuge experiment on sandy levee behavior under ground motion", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D30V89J2N

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10. Riccardo Cappa, Samuel Yniesta, Scott Brandenberg, Jonathan Stewart, Anne Lemnitzer (2014). "TEST 15M - RCK02 : Part 2 - 9m radius centrifuge experiment on sandy levee behavior under ground motions", Network for Earthquake Engineering Simulation (distributor), Dataset, DOI:10.4231/D3RB6W337

9. Harounian, A., Afacan, K., Stewart, J.P., and Brandenberg, S.J. (2010). “AHA02: Evaluation of nonlinear site response of soft clay using centrifuge models.” Network for Earthquake Engineering Simulation (database). Dataset. DOI: 10.4231/D3XK84Q4D

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Network for Earthquake Engineering Simulation (database). Dataset. DOI: 10.4231/D32B8VB9D

7. Reinert, E.T., Stewart, J., Moss, R.E.S., Ahdi, S.K., and Brandenberg, S.J. (2013). “Experiment 9 – Continuous Raw Data Files (2012 Re-Test).” Network for Earthquake Engineering Simulation. DOI: 10.4231/D3NP1WJ45
6. Reinert, E.T., Stewart, J., Moss, R.E.S., Ahdi, S.K., and Brandenberg, S.J. (2013). “Experiment 8 – SASW Array (2012 Re-Test).” Network for Earthquake Engineering Simulation. DOI: 10.4231/D30Z70W8Z
5. Reinert, E.T., Stewart, J., Moss, R.E.S., Ahdi, S.K., and Brandenberg, S.J. (2013). “Experiment 7 – Field Testing with MK-15 Shaker (2012 Re-Test).” Network for Earthquake Engineering Simulation. DOI: 10.4231/D38G8FH6G
4. Reinert, E.T., Stewart, J., Moss, R.E.S., Chrysovergis, P.S., and Brandenberg, S.J. (2013). “Experiment 6 – Continuous Raw Data Files.” Network for Earthquake Engineering Simulation. DOI: 10.4231/D34Q7QQ2B
3. Reinert, E.T., Stewart, J., Moss, R.E.S., Chrysovergis, P.S., and Brandenberg, S.J. (2013). “Experiment 5 – Shaker testing with Atom Ant Shaker.” Network for Earthquake Engineering Simulation. DOI: 10.4231/D3D795994
2. Reinert, E.T., Stewart, J., Moss, R.E.S., Chrysovergis, P.S., Ahdi, S.K., and Brandenberg, S.J. (2013). “Experiment 4 – SASW Array.” Network for Earthquake Engineering Simulation. DOI: 10.4231/D3J09W43H
1. Reinert, E.T., Stewart, J., Moss, R.E.S., Chrysovergis, P.S., and Brandenberg, S.J. (2013). “Experiment 3 – Field Testing with MK-15 shaker.” Network for Earthquake Engineering Simulation. DOI: 10.4231/D3SF2MB89

Funding Record (Total = $5,515,305, Total as PI = $4,214,967).

Award Title	Sponsor Award Number	Sponsor	Start Date	End Date	PI	UCLA Award Total
Design Practice for Pile Foundations in Laterally Spreading Ground	SA5404	Pacific Earthquake Engineering Research Center	10/1/2006	9/30/2009	Scott Ashford, Oregon State University	$87,359
Improved Fragility Functions for Bridges Susceptible to Large Ground Deformations and Liquefaction	SA5258	Pacific Earthquake Engineering Research Center	10/1/2005	9/30/2006	Scott J. Brandenberg, UCLA	$55,000
Fragility Functions for Liquefaction Screening of Bridges	SA5407	Pacific Earthquake Engineering Research Center	9/1/2006	8/30/2008	Scott J. Brandenberg, UCLA	$213,745
Evaluation of Nonlinear Site Response of Soft Clay using Centrifuge Models	08HQGR0037	United States Geological Survey	1/1/2008	9/30/2009	Scott J. Brandenberg, UCLA	$146,824
CPT-Based P-Wave Reflection Imaging of Embedded Objects	59A0691	California Department of Transportation	4/1/2009	6/30/2010	Scott J. Brandenberg, UCLA	$25,000
NEESR-II: Evaluation of Seismic Deformation Potential by Destructive Cyclic Field Testing	CMMI-0830081	National Science Foundation	10/1/2008	3/31/2013	Scott J. Brandenberg, UCLA	$429,526
Simulation of Global Bridge Response to 3-D Shaking and Lateral Deformations	6407	California Department of Transportation	1/1/2009	12/31/2010	Scott J. Brandenberg, UCLA	$140,057
Correlations Between Shear Wave Velocity and Penetration Resistance and Laboratory Soil Strength at Caltrans Bridge Sites	6417	California Department of Transportation	1/1/2009	12/31/2009	Scott J. Brandenberg, UCLA	$62,528

Laboratory Evaluation of Seismic Failure Mechanisms of Levees o Peat	G11AP20169	United States Geological Survey	7/1/2011	6/30/2013	Jonathan P. Stewart, UCLA	$79,026
Factors Affecting Seismic Levee Performance: Case Study from 2007 Niigata, Japan Earthquake	7607	California Department of Water Resources	3/14/2011	6/30/2016	Jonathan P. Stewart, UCLA	$384,087
Influence of Liquefaction on Earthquake Ground Motions	G12AP20098	United States Geological Survey	7/1/2012	12/31/2013	Scott J. Brandenberg, UCLA	$80,395
NEESR: Levees and Earthquakes: Averting an Impending Disaster	CMMI-1208170	National Science Foundation	7/1/2012	6/30/2016	Scott J. Brandenberg, UCLA	$651,066
Evaluation of Collapse and Non-Collapse of Parallel Bridges Affected by Liquefaction and Lateral Spreading	7976	Pacific Earthquake Engineering Research Center	7/1/2012	12/31/2013	Scott J. Brandenberg, UCLA	$93,199
Geophysical Methods for Determining the Geotechnical Engineering Properties of Earth Materials	252836	California Department of Transportation	4/1/2013	3/31/2017	Joseph Coe, Temple University	$15,255
Earthquakes and California Agriculture: Indentifying and Measuring Vulnerabilities and Potential Mitigation of Losses	201301862-1	CALIFORNIA SEISMIC SAFETY COMMISSION	2/1/2013	12/31/2013	Daniel Sumner, UC Davis	$19,996
Influence of Kinematic SSI on Foundation Input Motions for Bridges on Deep Foundations	8206 and 1119-NCTRBR	Pacific Earthquake Engineering Research Center	6/1/2013	6/30/2016	Scott J. Brandenberg, UCLA	$184,821
Seismic Deformation Potential of Peaty Organic Soils Underlying Delta Levees	4600010406	California Department of Water Resources	1/1/2014	12/31/2016	Scott J. Brandenberg, UCLA	$443,535

NHERI Cyberinfrastructure 2015-2019: UCLA Subaward	UTA15-000860	National Science Foundation	7/1/2015	6/30/2020	Ellen Rathje, UT Austin	$150,000
Development of Validated Methods for Soil-Structure Interaction Analysis of Buried Structures	65A0561	California Department of Transportation	6/1/2015	5/31/2017	Ertugrul Taciroglu, UCLA	$202,602
Development of a Validated Methodology for Seismic Analysis and Design of Standard and Pile-Supported Retaining Walls	65A0582	California Department of Transportation	6/1/2016	5/31/2018	Ertugrul Taciroglu, UCLA	$261,484
Soil-Foundation-Structure Interaction Effects on Cyclic Failure Potential of Silts and Clays	CMMI-1563638	National Science Foundation	7/15/2016	6/30/2019	Scott J. Brandenberg, UCLA	$626,498
Development of an Integrated Methodology for Assessing Integrity of Levees Protecting Natural Gas	PIR-17-013	Infraterra, Inc.	11/28/2018	11/28/2020	Ozgur Kozaci, Infraterra	$100,529
Laboratory Shear Wave Velocity Measurement of Compacted Fill for the California High Speed Rail Project	20175032	Dragados USA, inc.	12/31/17	8/16/17	Scott J. Brandenberg, UCLA	$28,643
Cyclic Direct Simple Shear Testing of San Francisco Bay Mud	20183898	Group Delta, Consultants	3/27/2018	10/31/2018	Scott J. Brandenberg, UCLA	$10,451
Cyclic Softening and Post Cyclic Volume Change of Fine-Grained Soil	In process	US Geological Survey	7/1/2019	6/30/2020	Scott J. Brandenberg, UCLA	$68,171
Next Generation Multi-Hazard Levee Risk Assessment	In process	California Delta Stewardship Council	7/1/2019	6/30/21	Scott J. Brandenberg, UCLA	$955,508

Analysis of Fine-grained Soil Failure in Chiba During 2011 Tohoku Earthquake, and Development of a Laboratory Testing Database	In process	Pacific Earthquake Engineering Research Center	1/15/2019	1/14/2020	Scott J. Brandenberg, UCLA	$79,152

PhD Students Supervised:

Pirooz Kashighandi, PhD 2009, Group Delta
Joseph Coe, PhD June 2010, Assistant Professor, Temple University
Minxing Zhao, PhD 2011, Group Delta
Edward T. Reinert, PhD 2014, Diaz Yourman Associates
Kamil Afacan, PhD 2014, Eskisehir Osmangazi University
Dong Youp Kwak, PhD 2014, UCLA Postdoctoral Scholar (co-advisor: Jonathan P. Stewart)
Shawn Ariannia, PhD 2015, GeoAdvantec
Ali Shafiee, PhD 2015, Shannon & Wilson (co-advisor: Jonathan P. Stewart)
Benjamin Turner, PhD 2016, Dan Brown and Associates (co-advisor: Jonathan P. Stewart)
Samuel Yniesta, PhD 2016, Assistant Professor, Ecole Polytechnique, Montreal
Yi Tyan Tsai, PhD 2018, GeoEngineers, Seattle.
Mohammad Eslami, PhD 2017, GeoPentech, Los Angeles
Sean Ahdi, PhD student, UCLA (co-advisor: Jonathan P. Stewart)

Current PhD Students:
Jason Buenker, Advanced to Candidacy
Yang Yang, Advanced to Candidacy
Claudia Rangel

MS Thesis Students Supervised
Naresh Bellana, MS thesis 2009, Hushmand and Associates
Alek Harounian, MS thesis 2010, AMEC Foster Wheeler
Adam Terronez, MS thesis student, UCLA and BSK Associates