

JEFFREY W. BERMAN

Curriculum Vitae

Civil and Environmental Engineering
214C More Hall
352700
Seattle, WA 98195

Phone: 206-616-3530
Fax: 206-543-1543
Email: jwberman@u.washington.edu

EDUCATIONAL HISTORY

State University of New York at Buffalo, Buffalo, NY

Ph.D., Civil Engineering

June, 2006

Dissertation: The Development of Tubular Eccentrically Braced Frame Links for the Seismic Retrofit of Braced Steel Bridge Piers

State University of New York at Buffalo, Buffalo, NY

M.S., Civil Engineering

February, 2003

Dissertation: Experimental Investigation of Light-gauge Steel Plate Shear Walls for the Seismic Retrofit of Buildings

State University of New York at Buffalo, Buffalo, NY

B.S., Civil Engineering, *Magna Cum Laude*

June, 2000

EMPLOYMENT HISTORY

University of Washington

Seattle, WA

Associate Professor, Department of Civil and Environmental Engineering, September 2012-present.

Assistant Professor, Department of Civil and Environmental Engineering, September 2006-September 2012.

State University of New York at Buffalo

Buffalo, NY

Post-Doctoral Research Associate, Department of Civil, Structural, and Environmental Engineering, Feb 2006- July 2006

State University of New York at Buffalo

Buffalo, NY

Graduate Research Assistant, Department of Civil, Structural, and Environmental Engineering, June 2001 – Feb. 2006.

State University of New York at Buffalo

Buffalo, NY

Teaching Assistant, Department of Civil, Structural, and Environmental Engineering, Sept. 1999 – June 2001.

Robert M. Sutherland, P.C.
Plattsburgh, NY, Summer Engineer, 1999-2000.

AWARDS AND HONORS

Service Award, 2013, George E. Brown Network for Earthquake Engineering.

Distinguished Teaching Award, 2012, University of Washington.

Faculty Mentor of the Year, 2011, Department of Civil and Environmental Engineering,
University of Washington, by student vote.

Milek Fellowship, 4/2008, American Institute of Steel Construction

Dr. Sophokles E. Logiadis Award for Innovation in Seismic Isolation or Energy Dissipation,
6/2006, University at Buffalo, School of Engineering and Applied Sciences,

J. James Croes Medal, 4/2005, American Society of Civil Engineers,

Chair's Recognition Award, 6/2005, University at Buffalo, Department of Civil Structural and
Environmental Engineering

CSEE Graduate Fellowship, 2001-2004, University at Buffalo, Department of Civil Structural
and Environmental Engineering,

Teaching Assistant of the Year Award, 6/2001, University at Buffalo, Department of Civil
Structural and Environmental Engineering

Senior Scholar Award, 2000, University at Buffalo, School of Engineering and Applied Sciences

Sherwood P. Prawel Award for the Outstanding Structural Engineering Scholar, 6/2000
University at Buffalo, Department of Civil Structural and Environmental Engineering

AFFILIATIONS AND OTHER APPOINTMENTS

None

PUBLICATIONS

Refereed archival journal publications

1. Lehman, D.E., Kuder, K.G., Gunnerson, A.K., Roeder, C.W., and Berman, J.W. (2013). "Circular Concrete Filled Tubes for Improved Sustainability and Seismic Resilience." *Journal of Structural Engineering*, ASCE, (In Press, Accepted 4/14).
2. Webster D.J., Berman J.W., and Lowes L.N. (2013). "Experimental Investigation of SPSW Web Plate Stress Field Development and Vertical Boundary Element Demand" *Journal of Structural Engineering*, ASCE, (In Press, Accepted 10/13).

3. Weigand, J.M. and Berman, J.W. (2013). "Integrity of Single Plate Shear Connections Subjected to Simulated Column Collapse Loading." *Journal of Structural Engineering*, ASCE, (In Press, Accepted 9/13)
4. Hsiao, P.C., Lehman, D.E., Berman, J.W., Roeder, C.W., and Powell, J. (2013). "Seismic Vulnerability of Older Braced Frames." *Journal of Performance of Constructed Facilities* (In Press, Accepted 3/2013). [http://dx.doi.org/10.1061/\(ASCE\)CF.1943-5509.0000394](http://dx.doi.org/10.1061/(ASCE)CF.1943-5509.0000394)
5. Clayton, P.M., Berman, J.W., and Lowes, L.N. (2013). "Subassembly Testing and Modeling of Self-Centering Steel Plate Shear Walls." *Engineering Structures* (In Press, Accepted 6/2013). <http://dx.doi.org/10.1016/j.engstruct.2013.06.030>
6. van de Lindt, J., Berman, J., Shing, B. (2013). "Special Issue on NEES 1: Advances in Earthquake Engineering.", *Editorial, J. Struct. Eng.* 139, SPECIAL ISSUE: NEES 1: Advances in Earthquake Engineering, 1097–1098. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000844](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000844)
7. Martin, K., Van Stan, J.T., Dickerson-Lange, S.E., Lutz, J., Berman, J.W., Gersonde, R., and Lundquist, J.D. (2013) "Development and Testing of a Snow Interceptometer to Quantify Canopy Water Storage and Interception Processes in the Rain/Snow Transition Zone of the North Cascades, Washington, USA," *Water Resources Research*, Vol 49, pp 1-14. <http://dx.doi.org/10.1002/wrcr.20271>
8. Malakoutian, M., Berman, J.W., and Dusicka, P. (2013) "The Linked Column Framing System: Analysis and Design Recommendations," *Earthquake Engineering and Structural Dynamics*, Vol. 42, No. 6, pp. 795-814. <http://dx.doi.org/10.1002/eqe.2245>
9. Berman, J.W. and Bruneau, M. (2013) "Overview of the Development of Design Recommendation for Eccentrically Braced Frame Links with Built-Up Box Sections." *Engineering Journal*, Vol. 50, No. 1, pp. 21-32.
10. Weigand, J.M. and Berman, J.W. (2012) "Behavior of Butt-Welds and Treatments Using Low-Carbon Steel under Cyclic Inelastic Strains," *Journal of Constructional Steel Research*, Vol 75, pp. 45-54. <http://dx.doi.org/10.1016/j.jcsr.2012.03.007>
11. Liu, S., Warn, G.P., and Berman, J.W. (2012) "Estimating Natural Periods of Steel Plate Shear Wall Frames." *Journal of Structural Engineering*, ASCE, Vol. 139, No. 1, pp. 155-161. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000610](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000610)
12. Clayton, P.M., Winkley, T. Berman, J.W., Lowes, L.N. (2012) "Experimental Investigation of Self-Centering Steel Plate Shear Walls" *Journal of Structural Engineering*, ASCE, Vol. 138, No. 7, pp. 952-960. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000531](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000531)
13. Kuder, K., Lehman, D.E., Berman, J.W., Hannesson, G., and Shogren R. (2012) "Mechanical Properties of Self-Consolidating Concrete Blended with High Volumes of Fly Ash and Slag." *Construction and Building Materials*, Vol. 34, pp. 285-295. <http://dx.doi.org/10.1016/j.conbuildmat.2012.02.034>
14. Baldvins, N., Berman, J.W., Lowes, L.N., Low, N., and Janes, T. (2012) "Development of Damage Prediction Models for Steel Plate Shear Walls" *Earthquake Spectra*, EERI, Vol 28, No. 2, May 2012. <http://dx.doi.org/10.1193/1.4000003>
15. Berman, J.W., Wang, B.S., Olson, A., Roeder, C.W., and Lehman, D.E., (2012) "Rapid Assessment of Gusset Plate Safety in Steel Truss Bridges" *Journal of Bridge Engineering*, ASCE, Vol. 17, No. 2, pp. 221-231. [http://dx.doi.org/10.1061/\(ASCE\)BE.1943-5592.0000246](http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000246)
16. Clayton, P.M., Berman, J.W., Lowes, L.N. (2012) "Seismic Design and Performance of Self-Centering Steel Plate Shear Walls" *Journal of Structural Engineering*, ASCE, Vol. 138, No. 1, pp. 22-30. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000421](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000421)
17. Berman, J.W. (2011) "Seismic Behavior of Code Designed Steel Plate Shear Walls" *Engineering Structures*, Vol. 33, No. 1, pp. 230-244. <http://dx.doi.org/10.1016/j.engstruct.2010.10.015>

18. Berman, J.W. and Brown, D.L. (2010) "Field Monitoring of a Glass Fiber Reinforced Polymer Bridge Deck." *Journal of Performance of Constructed Facilities*, ASCE, Vol. 24, No. 3, pp. 215-222. [http://dx.doi.org/10.1061/\(ASCE\)CF.1943-5509.0000102](http://dx.doi.org/10.1061/(ASCE)CF.1943-5509.0000102)
19. Berman, J.W., Hauksdottir, H.O., and Okazaki, T. (2010) "Reduced Link Sections for Improving the Ductility of Eccentrically Braced Frame Link-to-Column Connections" *Journal of Structural Engineering*, ASCE, Vol. 136, No. 5, pp 543-553. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000157](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000157)
20. Brown, D.L. and Berman, J.W. (2010) "Fatigue and Strength Evaluation of Two Glass Fiber Reinforced Polymer Bridge Decks" *Journal of Bridge Engineering*, ASCE, Vol. 15, No. 3, pp. 290-301. [http://dx.doi.org/10.1061/\(ASCE\)BE.1943-5592.0000053](http://dx.doi.org/10.1061/(ASCE)BE.1943-5592.0000053)
21. Berman, J.W. and Bruneau, M. (2009) "Cyclic Testing of Buckling Restrained Braced Frame with Novel Gusset Connection" *Journal of Structural Engineering*, ASCE, Vol. 135, No. 12, pp. 1499-1510. [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000078](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000078)
22. Berman, J.W. and Bruneau, M. (2008) "Capacity Design of Vertical Boundary Elements in Steel Plate Shear Walls" *Engineering Journal*, AISC, Vol 45, No. 1, pp. 55-71.
23. Berman, J.W. and Bruneau, M. (2008) "Tubular Links for Eccentrically Braced Frames Part 2: Experimental Verification" *Journal of Structural Engineering*, ASCE, Vol. 134, No. 5, pp. 702-712. [http://dx.doi.org/10.1061/\(ASCE\)0733-9445\(2008\)134:5\(702\)](http://dx.doi.org/10.1061/(ASCE)0733-9445(2008)134:5(702))
24. Berman, J.W. and Bruneau, M. (2008) "Tubular Links for Eccentrically Braced Frames Part 1: Finite Element Parametric Study" *Journal of Structural Engineering*, ASCE, Vol. 134, No. 5, pp. 692-701. [http://dx.doi.org/10.1061/\(ASCE\)0733-9445\(2008\)134:5\(692\)](http://dx.doi.org/10.1061/(ASCE)0733-9445(2008)134:5(692))
25. Berman, J.W. and Bruneau, M. (2007) "Experimental and Analytical Investigation of Tubular Links for Eccentrically Braced Frames" *Engineering Structures*, Vol. 29, No. 8, pp. 1929–1938. <http://dx.doi.org/10.1016/j.engstruct.2006.10.012>
26. Bruneau, M., Berman, J.W., Lopez-Garcia, D., and Vian, D. (2007) "A Review of Steel Plate Shear Wall Design Requirements and Research" *Engineering Journal*, AISC, Vol. 44, No. 1, pp. 27-34.
27. Berman, J.W. and Bruneau, M. (2005) "Supplemental System Retrofit Considerations for Braced Steel Bridge Piers" *Journal of Earthquake Engineering and Structural Dynamics – Special Issue on Transportation Structures*, Vol. 34, No. 4-5, pp. 497-517. <http://dx.doi.org/10.1002/eqe.448>
28. Berman, J.W., Celik, O.C., and Bruneau, M. (2005) "Comparing Hysteretic Behavior of Light-Gauge Steel Plate Shear Walls and Braced Frames" *Engineering Structures*, Vol. 27, No. 3, pp. 475-485. <http://dx.doi.org/10.1016/j.engstruct.2004.11.007>
29. Celik, O. C., Berman, J. W., and Bruneau, M. (2005) "Cyclic Testing of Braces Laterally Restrained by Steel Studs," *Journal of Structural Engineering*, ASCE Vol. 131, No. 7, pp. 1114-1124. [http://dx.doi.org/10.1061/\(ASCE\)0733-9445\(2005\)131:7\(1114\)](http://dx.doi.org/10.1061/(ASCE)0733-9445(2005)131:7(1114))
30. Berman, J. W. and Bruneau, M. (2005) "Experimental Investigation of Light-Gauge Steel Plate Shear Walls," *Journal of Structural Engineering*, ASCE, Vol. 131, No. 2, pp. 259-267. [http://dx.doi.org/10.1061/\(ASCE\)0733-9445\(2005\)131:2\(259\)](http://dx.doi.org/10.1061/(ASCE)0733-9445(2005)131:2(259))
31. Berman, J. W. and Bruneau, M. (2004) "Steel Plate Shear Walls are Not Plate Girders," *Engineering Journal*, AISC, Vol.41, No.3, pp.95-106.
32. Berman, J. and Bruneau, M. (2003) "Plastic Analysis and Design of Steel Plate Shear Walls," *Journal of Structural Engineering*, ASCE, Vol. 129, No. 11, pp. 1148-1156. 2005 J. James Croes Medal awarded by ASCE. [http://dx.doi.org/10.1061/\(ASCE\)0733-9445\(2003\)129:11\(1448\)](http://dx.doi.org/10.1061/(ASCE)0733-9445(2003)129:11(1448))
33. Warn, G., Berman, J., Whittaker, A., and Bruneau, M. (2003) "Reconnaissance and Preliminary Analysis of a Damaged Building Near Ground Zero," *Journal of Structural Design of Tall and Special Buildings*, Vol. 12, pp 371-391. <http://dx.doi.org/10.1002/tal.230>

Other journal publications in progress:

34. Malakoutian M., Arlindo L., Berman J.W., and Dusicka P., (2013). “Quantification of LCF Seismic Performance Factors For Use in Seismic Design”, *Engineering and Structural Dynamics*, (Submitted 5/13, Revised 5/14).
35. Clayton, P.M, Berman, J.W., and Lowes, L.N., (2014). “Design and Seismic Performance of Self-Centering Steel Plate Shear Walls with Web Plates Connected to the Beams Only.” *Journal of Constructional Steel Research*, Submitted 2/14.

Conference proceedings and other non-journal articles

Fully refereed publications

1. Sen, A.D., Pan, L., Sloat, D., Roeder, C.W., Lehman, D.E., Berman, J.W., Tsai, K.C., and Li, C.H. (2014) “Numerical and Experimental Assessment of Chevron Braced Frames with Weak Beams.” Proceedings of the 10th National Conference on Earthquake Engineering, Anchorage AK, July 2014.
2. Clayton, P.M., Dowden, D.M., Li, C.H., Berman, J.W., Bruneau, M., Tsai, K.C., and Lowes, L.N. (2014) “Advances in Self-Centering Steel Plate Shear Wall Testing and Design.” Proceedings of the 10th National Conference on Earthquake Engineering, Anchorage AK, July 2014.
3. Johnson, M., Sloat, D., Roeder, C.W., Lehman, D.E., and Berman, J.W. (2014) “Seismic Performance of Concentrically Braced Frame Connections.” Proceedings of the 10th National Conference on Earthquake Engineering, Anchorage AK, July 2014.
4. Berman, J.W., Clayton, P.M., Lowes, L.N., Bruneau, M., Fahnestock, L.A., and Tsai, K.C. (2010) “Development of a Recentering Steel Plate Shear Wall and Addressing Critical Steel Plate Shear Wall Research Needs” Proceedings of the Joint 9th National Conference on Earthquake Engineering and 10th Canadian Conference on Earthquake Engineering, Toronto, CA, July 2010.
5. Berman, J.W., Okazaki, T., and Hauksdottir, H.O. (2010) “Reduced Link Sections for Improving the Ductility of Eccentrically Braced Frame Link-to-Column Connections” Proceedings of the Joint 9th National Conference on Earthquake Engineering and 10th Canadian Conference on Earthquake Engineering, Toronto, CA, July 2010.
6. Berman, J.W., and Pollino, M., (2006) “The MCEER Student Leadership Council and Earthquake Engineering Education Activities”, Proceedings of the 8th National Conference on Earthquake Engineering, San Francisco, CA, April 2006.
7. Berman, J.W., and Bruneau, M., (2006) “Proof-of-Concept Testing and Finite Element Modeling of Self-Stabilizing Hybrid Rectangular Links for Eccentrically Braced Frames”, Proceedings of the 8th National Conference on Earthquake Engineering, San Francisco, CA, April 2006, paper 8NCEE-239.
8. Berman, J., Bruneau, M., (2005) “Seismic Response and Retrofit Design Recommendations for Steel Truss Bridge Piers”, Proceedings of the 2005 New York City Bridge Conference, Bridge Engineering Association, New York, NY, September 2005.

Refereed by abstract only

1. Johnson, E.S., Wiegand, J.W., Francisco, T., Fahnestock, L.A., Liu, J., and Berman J.W. “Large-Scale Testing of a Steel-Concrete Composite Floor System Under Column Loss Scenarios.” ASCE/SEI Structures Congress, Boston, MA, April 2014.
2. Sloat, D., Roeder, C.W., Lehman, D.E., and Berman, J.W., (2013) “Survey and Testing of Pre-1988 Braced Frame Structures from the West Coast of the United States.” Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013

3. Sen, A.D., Sloat, D., Pan, L., Roeder, C.W., Lehman, D.E., and Berman, J.W., "Evaluation of the Seismic Performance of Two-Story Concentrically Braced Frames with Weak Beams." Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013
4. Clayton, P.M., Dowden, D.M., Li, C.-H., Berman, J.W., Lowes, L.N., Bruneau, M., Tsai, K.-C. (2013) "Pseudo-dynamic Testing of Self-Centering Steel Plate Shear Walls," Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013
5. Wang, B.S., Berman, J.W., Roeder, C.W., and Lehman, D.E. (2013) "Estimation of the Maximum Von Mises Stress in the Steel Truss Bridge Gusset Plate Connections" Proceedings of the 30th International Bridge Conference, Pittsburgh, PA, June 2013.
6. Wang, B.S., Berman, J.W., Jost, S., Roeder, C.W., and Lehman, D.E. (2013) "Re-Evaluating the Effect of Connection Length in Riveted Steel Connections" Proceedings of the 30th International Bridge Conference, Pittsburgh, PA, June 2013.
7. Weigand, J.M., Francisco, T., Johnson, E.S., Fahnestock, L.A., Liu, J., and Berman, J.W. (2013). "Large-Scale Experimental Evaluation of Steel Gravity Framing Structural Integrity." ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
8. Clayton, P.M., Dowden, D.M., Li, C.-H., Berman, J. W., Bruneau, M., Lowes, L.N., Tsai, K.C. (2013) "Full-Scale Testing of Self-Centering Steel Plate Shear Walls," ASCE/SEI Structures Congress, Pittsburg, PA, May 2013.
9. Malakoutian M., Berman J.W., Dusicka P, Lopes A. (2013). "Seismic Design Parameters for the Linked Column Frame System", ASCE/SEI Structures Congress, Pittsburg, PA, May 2013.
10. Malakoutian M., Berman W.J., Dusicka P, Lopes A. (2012). "Seismic Performance and Design of Linked Column Frame System", 15th World Conference on Earthquake Engineering, Lisbon, Portugal, September 2012.
11. Webster, D.J., Berman, J.W., and Lowes, L.N. (2012). "The Elastic and Inelastic Post-Buckling Behavior of Steel Plate Shear Wall Web Plates and their Influence on Vertical Boundary Elements." Proceedings of the Annual Stability Conference Structural Stability Research Council, Grapevine, Texas, April 2012.
12. Weigand, J.M., Meissner, J.E., Francisco, T., Berman, J.W., Fahnestock, L.A., and Liu, J. "Testing the Integrity of Steel Gravity Frames subjected to Large Vertical Deflections: Components." ASCE/SEI Structures Congress, Chicago, IL, March 2012.
13. Clayton, P.M., Dowden, D.M., Winkely, T., Berman, J.W., Bruneau, M., and Lowes, L.N. "Experimental Investigation of Self-Centering Steel Plate Shear Walls." ASCE/SEI Structures Congress, Chicago, IL, March 2012.
14. Clayton, P.M., Berman, J.W., and Lowes, L.N. (2012) "Experimental Testing of Self-Centering Steel Plate Shear Walls." 9th International Conference on Urban Earthquake Engineering/ 4th Asia Conference on Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan, March 2012.
15. Purashinge, R, Dusicka, P., Berman, J.W., Bautissa, E., and Noddings, M. (2011) "Research Results to undergraduate civil engineering classroom via a design project and hands on laboratory models." Proceedings of the 2011 ASEE Annual Conference, Vancouver, BC, June 2011.
16. Clayton, P.M, Dowden, D., Purba, R., Berman, J.W., Lowes, L.N., and Bruneau M. (2011) "Seismic Design and Analysis of Resilient Steel Plate Shear Walls." ASCE/SEI Structures Congress, Las Vegas, NV, April 2011.
17. Berman, J.W., Wang, B.S., Olson, A., Roeder, C.W., and Lehman, D.E. (2011) "Simple Check for Yielding in Truss Bridge Gusset Plate Connections" ASCE/SEI Structures Congress, Las Vegas, NV, April 2011.

18. Clayton, P.M., Berman, J.W., Winkley, T., Lowes, L.N. (2011). "Development of a Self-Centering Steel Plate Shear Wall." Proceedings of the Third Asia-Pacific Young Researchers and Graduate Symposium, Taipei, Taiwan, March, 2011.
19. Berman, J.W., Olson, A., Wang., B.S., Roeder, C.W., and Lehman, D.E. (2010) "Evaluation of Gusset Plate Connections in Steel Truss Bridges" Proceedings of the 27th International Bridge Conference, Pittsburgh, PA, June 2010.
20. Berman, J.W., Olson, A., Wang., B.S., Roeder, C.W., and Lehman, D.E. (2010) "Rapid Evaluation of Gusset Plates in Steel Truss Bridges." FHWA Bridge Engineering Conference: Highways for LIFE and Accelerated Bridge Construction, Orlando, FL, April 2010.
21. Baldvins, N., Berman, J.W., Lowes, L.N., Low, N., and Janes, T. (2010) "Performance Based Design Tools for Steel Plate Shear Walls" Proceedings of the combined ASCE/SEI Structures Congress and North American Steel Construction Conference, Orlando, FL, April 2010.
22. Weigand, J., and Berman, J.W. (2009). "Rotation and Strength Demands for Simple Connections to Support Large Vertical Deflections." Proceedings of the ASCE/SEI Structures Congress, Austin, TX, April 2009.
23. Dusicka, P., Berman, J.W., and Purashinge, R. (2009) "Steel Frame Lateral System Concept Utilizing Replaceable Links." 2009 New Zealand Society for Earthquake Engineering Technical Conference, Christchurch, New Zealand, April 2009.
24. Weigand, J.M., and Berman, J.W. (2008) "Rotation and Strength Demands for Simple Connections to Support Development of Catenary Action." 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.
25. Berman, J.W., and Bruneau, M. (2008) "Development of Self-Stabilizing Links for Eccentrically Braced Frames." 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.
26. Berman, J.W., and Bruneau, M. (2008) "An Improved Procedure for Capacity Design of Vertical Boundary Elements in Steel Plate Shear Walls." 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.
27. Berman, J.W., Lowes, L.N., Okazaki, T., Bruneau, M., Tsai, K.C, Driver, R.G., and Sabelli, R. (2008) "Research Needs and Future Directions for Steel Plate Shear Walls." Proceedings of the ASCE/SEI Structures Congress, Vancouver, BC, Canada, April 2008.
28. Brown, D., and Berman, J.W. (2008) "Fatigue, Ultimate, and Rail Capacity Comparison of Two Fiber Reinforced Polymer Bridge Decks." Proceedings of the ASCE/SEI Structures Congress, Vancouver, BC, Canada, April 2008.
29. Bruneau, M., Berman, J.W., Qu, B., Warn, G.P., Purba, R., Vian, D., (2007) "Experimental and Analytical Research on Behavior of Steel Plate Shear Walls", Proceedings of the 76th Annual SEAOC Convention, Lake Tahoe, CA, September 2007.
30. Berman, J.W., and Bruneau, M., (2006) "Overview of the Development of Tubular Links for Eccentrically Braced Frames", Proceedings of the 4th International Symposium on Steel Structures, Seoul, South Korea, November 2006.
31. Berman, J.W., and Bruneau, M., (2006) "Development of Self-Stabilizing Hybrid Rectangular Links for Eccentrically Braced Frames", Proceedings of the 1st European Conference on Earthquake Engineering and Seismology, Geneva, Switzerland, September 2006, also to 5th National Seismic Conference on Bridges and Highways, San Francisco, CA, September 2006.
32. Celik, O.C., Berman, J.W., and Bruneau, M. (2006) "Hysteretic Energy Dissipation in Laterally Restrained Steel Tube and Solid Bar Braces", Proceedings of the 1st European Conference on Earthquake Engineering and Seismology, Geneva, Switzerland, September 2006.
33. Celik, O.C., Berman, J.W., and Bruneau, M. (2006) "Ductile Design and Testing of Steel Frames Having Moveable Bracing Infills", Proceedings of the Fifth International Conference

- on Behavior of Steel Structures in Seismic Areas - STESSA 2006, Yokohama, Japan, August 2006.
34. Bruneau, M., Berman, J., Lopez Garcia, D., Vian, D., (2005) "Steel Plate Shear Wall Buildings: Design Requirements and Research", Invited Paper, North American Steel Construction Conference, AISC, Montreal, Canada, April 2005.
 35. Berman, J. W., Vian, D., and Bruneau, M., (2005) "Steel Plate Shear Walls – From Research to Codification," 2005 Structures Congress, ASCE, New York, NY, April 20-24, 2005.
 36. Berman, J.W., and Bruneau, M., (2004) "Plastic Design and Testing of Light-Gauge Steel Plate Shear Walls," 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 1-6, 2004, paper 3323.
 37. Berman, J.W., (2004) "Testing of a Laterally Stable Eccentrically Braced Frame for Steel Bridge Piers", *Student Research Accomplishments 2003-2004, MCEER-04-SP05*, pp 1-6, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY. *MCEER Student Paper Competition Winner*
 38. Berman, J.W., and Bruneau, M., (2004) "Proof-of-Concept Testing of a Laterally Stable Eccentrically Braced Frame for Steel Bridge Piers", *20th US-Japan Bridge Engineering Workshop*, Washington, D.C., October, 2004. Also submitted to *3rd US-PRC Workshop on Seismic Behavior and Design of Special Highway Bridges*, Buffalo, NY, October, 2004.
 39. Berman, J.W., Bruneau, M., (2003) "Cyclic Testing of Special Steel Shear Walls and Modular Infill Panels", Proceedings of the Fourth International Conference on Behavior of Steel Structures in Seismic Areas - STESSA 2003, Naples, Italy, June 2003, pp 135-139.
 40. Berman, J.W., (2003) "Cyclic Testing of Light-Gauge Steel Plate Shear Walls", *Student Research Accomplishments 2002-2003, MCEER-03-SP06*, pp 1-8, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.
 41. Berman, J.W., (2002) "Plastic Analysis and Design of Steel Plate Shear Walls", *Student Research Accomplishments 2001-2002, MCEER-02-SP09*, pp 35-40, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.
 42. Berman, J.W., and Warn, G., (2002) "Analysis of a Damaged Building Near Ground Zero", *Student Research Accomplishments 2001-2002, MCEER-02-SP09*, pp 105-111, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.
 43. Bruneau, M., Whittaker, A., Reinhorn, A., Berman, J.W., Warn, G., Huyck, C., Adams, B., (2002) Invited keynote lecture, "Engineering and Organizational Issues Related to the World Trade Centre Terrorist Attack", Proc. of Int. Conf. on Protection of Structures Against Hazards, Singapore, Nov. 2002, pp. 1-10.
 44. Warn, G., Berman, J., Whittaker, A. Bruneau, M. (2002) "Forensic Engineering Study of 130 Liberty Plaza", Proc. of Learning from Urban Disasters; National Science Foundation Response and Opportunities for Future Research Hazards Forum Workshop, New York University, Dec. 2001, Natural Hazards Center Report.
 45. Berman, J.W., and Bruneau, M., (2002) "Experimental Investigation of Light-Gauge Steel Plate Shear Walls", *KEERC-MCEER Joint Seminar on Contributions to Earthquake Engineering*, Vol. 2, pp. 136-142. Korean Earthquake Engineering Research Center, Seoul, South Korea.
 46. Lee, G., Bruneau, M., Whittaker, A., Reinhorn, A., Berman, J., Warn, G. (2002) "Damage to Buildings at Ground Zero Area and Ancillary Benefits of Earthquake-Resistant Design with Regard to Human-Made Disasters", Invited Lecture, Proc. of the Urban Hazards Forum, John Jay College of Criminal Justice, January 2002.
 47. Berman, J.W., (2001) "Moveable Infills for Seismic Energy Dissipation", *Student Research Accomplishments 2000-2001, MCEER-01-SP02*, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.

Complete books written

Parts of books (chapters in edited books)

1. Warn, G., Berman, J.W., Whittaker, A., and Bruneau, M., (2003). "Investigation of a Damaged High-Rise Building Near Ground Zero", Chapter in "Beyond September 11th: An Account of Post-disaster Research", Special Publication #39, Natural Hazards Research and Applications Information Center, University of Colorado, Boulder, CO, pp.199-240.

Books edited

Journal issues edited

1. Special Issue on NEES 1: Advances in Earthquake Engineering, Journal of Structural Engineering, Vol. 139 (2013), Co-Eds: van de Lindt, J., Shing, P.
2. Special Issue on NEES 2: Advances in Earthquake Engineering, Journal of Structural Engineering, Vol. 139 (2013), Co-Eds: van de Lindt, J., Shing, P.

Patents submitted and/or awarded

Abstracts, letters, non-refereed papers, technical reports

Technical reports

1. Burgdorfer, R., Berman, J.W., and Roeder, C.W. (2013) "Determining the Cost/Benefit of Routine Maintenance Cleaning of Steel Bridges to Prevent Structural Deterioration." Report *WA-RD 811.1*, Washington State Department of Transportation, Olympia, WA.
2. Weigand, J.M. and Berman, J.W. (2011) "Testing of Butt-Welds and Butt-Weld Treatments using Nucor A36 Low Carbon Steel under Cyclic Axial Strain." Report to Sponsor: HNTB Corporation, Bellevue, WA.
3. Berman, J.W., Wang, B.S., Roeder, C.W., Olson, A.W., and Lehman, D.L. (2010) "Triage Evaluation of Gusset Plates in Steel Bridges." Report *WA-RD 757.1*, Washington State Department of Transportation, Olympia, WA.
4. Frymoyer, M.C., and Berman, J.W. (2009) "Remaining Life Assessment of In-Service Luminaire Support Structures" Report No. *WA-RD 735.1*, Washington State Department of Transportation, Olympia, WA.
5. Berman, J.W. (2009). "Testing of Nucor A36 Low Carbon Steel under Cyclic Axial and Shear Strain" Report to Sponsor: HNTB Corporation, Bellevue, WA.
6. Berman, J.W., Brown, D., and Roeder, C., (2007) "The Fatigue, Strength, and Connection Performance Characteristics of Two Glass Fiber Reinforced Polymer Bridge Decks" Report to Sponsor: David Evans and Associates, Inc., Olympia, WA.
7. Berman, J.W., Brown, D., and Roeder, C., (2007) Field Deflection Monitoring of the FRP Deck at the Getchell Road Bridge #453, Snohomish County, WA" Report to Sponsor: CES Inc. Engineering.
8. Berman, J. W., and Bruneau, M., (2006) "Further Development of Tubular Eccentrically Braced Frame Links for the Seismic Retrofit of Braced Steel Truss Bridge Piers" *Technical Report MCEER-06-0006*, Multidisciplinary Center for Earthquake Engineering Research, , Buffalo, NY.
9. Berman, J. W., and Bruneau, M., (2005) "Approaches for the Seismic Retrofit of Braced Steel Bridge Piers and Proof-of-Concept Testing of a Laterally Stable Eccentrically Braced Frame" *Technical Report MCEER-05-0004*, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.

10. Celik, O.C., Berman, J.W., and Bruneau, M., (2004) "Cyclic Testing of Braces Laterally Restrained by Steel Studs to Enhance Performance During Earthquakes," *Technical Report MCEER-04-0003*, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.
11. Berman, J.W., and Bruneau, M. (2003) "Experimental Investigation of Light-Gauge Steel Plate Shear Walls for the Seismic Retrofit of Buildings," *Technical Report MCEER-03-0001*, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.
12. Berman, J.W., Warn, G., Whittaker, A., and Bruneau, M., (2002) "Engineering and Organizational Issues Related to the World Trade Center Attack, Volume 2, Reconnaissance and Preliminary Assessment of a Damaged Building Near Ground Zero." *MCEER Special Report - MCEER-02-SP03*, Multidisciplinary Center for Earthquake Engineering Research, Buffalo, NY.

Other significant research dissemination (web sites, software, Wikis, etc.)

None

OTHER SCHOLARLY ACTIVITY

Invited lectures and seminars.

1. 2013 National Institute of Standards and Technology, "Large-Scale Evaluation of Steel Gravity Framing Structural Integrity: Experiments, Modeling Recommendations, and Future Work." Gaithersburg, MD, June, 2013. (Presented by Weigand)
2. Pennsylvania State University, Structural Engineering Seminar, *Recent Advances in Steel Plate Shear Walls*, April 2013.
3. University of British Columbia, Structural Engineering Seminar, *UW Earthquake Engineering Research and NEES Steel Plate Shear Walls Research*, December 2010
4. University of Illinois, Structural Engineering Seminar, *NEES Steel Plate Shear Walls Research*, October 2010
5. Washington State Department of Transportation, *Triage Evaluation of Gusset Plates in Steel Truss Bridge – A Workshop for WSDOT Consultants*, Olympia, WA, May 2010.
6. AASHTO Bridge Task Force T-14, *A Triage Procedure for the Rapid Assessment of Steel Truss Bridge Gusset Plates*, Orlando, FL, January 2010
7. NSF CMMI Grantees Conference, *Ph.D. and Beyond – A Discussion of Life Beyond the Ph.D.*, June 2009 (Selected by NSF Program Manager to Participate).
8. Washington State Department of Transportation, *Fatigue Life of Luminaire and Traffic Signal Poles*, July 2008.
9. ASCE/SEI Structures Congress, Vancouver, BC, *Research Needs and Future Directions for Steel Plate Shear Walls*, April, 2008.
10. National Center for Earthquake Engineering Research, Taipei, Taiwan, *Unconstrained Gusset Connections for Buckling Restrained Braced Frames*, November 2007
11. National Center for Earthquake Engineering Research, Taipei, Taiwan, *Development of Tubular Links for Eccentrically Braced Frames*, November 2007
12. Kobe University/University of Washington Symposium on Design Strategy Towards Safety and Symbiosis of Urban Space, Kobe, Japan, *Unconstrained Gusset Connections for Buckling Restrained Braced Frames*, November 2007
13. Washington State Department of Transportation, *Bridge Engineering Research and Future Projects*, October 2006.
14. 4th International Symposium on Steel Structures, Seoul, South Korea, *Overview of the Development of Tubular Links for Eccentrically Braced Frames*, November 2006.

Presentations given at conferences.

1. Johnson, E.S., Wiegand, J.W., **Francisco, T.**, Fahnestock, L.A., Liu, J., and Berman J.W. "Large-Scale Testing of a Steel-Concrete Composite Floor System Under Column Loss Scenarios." ASCE/SEI Structures Congress, Boston, MA, April 2014.
2. Sloat, D., Roeder, C.W., Lehman, D.E., and **Berman, J.W.**, (2013) "Survey and Testing of Pre-1988 Braced Frame Structures from the West Coast of the United States." Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013
3. Sen, A.D., Sloat, D., Pan, L., Roeder, C.W., Lehman, D.E., and **Berman, J.W.**, "Evaluation of the Seismic Performance of Two-Story Concentrically Braced Frames with Weak Beams." Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013
4. **Clayton, P.M.**, Dowden, D.M., Li, C.-H., Berman, J.W., Lowes, L.N., Bruneau, M., Tsai, K.-C. (2013) "Pseudo-dynamic Testing of Self-Centering Steel Plate Shear Walls," Proc. 5th International Conference on the Advances in Experimental Structural Engineering, Taipei, Taiwan, November, 2013
5. **Wang, B.S.**, Berman, J.W., Roeder, C.W., and Lehman, D.E. (2013) "Estimation of the Maximum Von Mises Stress in the Steel Truss Bridge Gusset Plate Connections" Proceedings of the 30th International Bridge Conference, Pittsburgh, PA, June 2013.
6. **Wang, B.S.**, Berman, J.W., Jost, S., Roeder, C.W., and Lehman, D.E. (2013) "Re-Evaluating the Effect of Connection Length in Riveted Steel Connections" Proceedings of the 30th International Bridge Conference, Pittsburgh, PA, June 2013.
7. Sen, A.D., Sloat, D., Pan, L., Roeder, C.W., Lehman, D.E., and **Berman, J.W.**, "Seismic Performance of Older Steel Braced Frames." Quake Summit, Reno NV, August, 2013
8. **Clayton, P.M.**, Dowden, D.M., Li, C.-H., Berman, J.W., Lowes, L.N., Bruneau, M., Tsai, K.-C. (2013) "Recent Advances in Self-Centering Steel Plate Shear Wall Testing," Quake Summit, Reno NV, August, 2013
9. **Clayton, P.M.**, Dowden, D.M., Li, C.-H., Berman, J. W., Bruneau, M., Lowes, L.N., Tsai, K.C. (2012) "Full-Scale Testing of Self-Centering Steel Plate Shear Walls," ASCE/SEI Structures Congress, Pittsburg, PA, May 2013.
10. **Webster D.J.**, Berman J.W., and Lowes L.N. (2013). "Alternative SPSW Web Plate Model Through Analytical and Experimental Investigations". ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
11. Hsiao, P.C., Lehman, D.E., **Berman, J.W.**, Roeder, C.W., and Powell, J. (2013). "Seismic Performance of Older Steel Braced Frames." ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
12. Pospisil, M., **Warn, G.W.**, and Berman, J.W. (2013). "Design Lateral Force Distribution for Steel Plate Shear Walls Based on Plastic Behavior." ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
13. Malakoutian M., **Berman J.W.**, Dusicka P, Lopes A. (2013) "Seismic Design Parameters for the Linked Column Frame System", ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
14. **Wiegand, J.M., Francisco, T.**, Johnson, E.S., Fahnestock, L.A., Liu, J., and Berman, J.W. (2013). "Large-Scale Experimental Evaluation of Steel Gravity Framing Structural Integrity." ASCE/SEI Structures Congress, Pittsburgh, PA, May, 2013.
15. **Berman, J.W.** (2013). "Recent Advances in Steel Plate Shear Walls." North American Steel Construction Conference, St. Louis, MO, April 2013.

16. **Malakoutian M.**, Berman W.J., Dusicka P, Lopes A. (2012). “Seismic Performance and Design of Linked Column Frame System”, 15th World Conference on Earthquake Engineering, Lisbon, Portugal, September 2012.
17. **Webster, D.J.**, Berman, J.W., and Lowes, L.N. (2012). “The Elastic and Inelastic Post-Buckling Behavior of Steel Plate Shear Wall Web Plates and their Influence on Vertical Boundary Elements.” Proceedings of the Annual Stability Conference Structural Stability Research Council, Grapevine, Texas, April 2012.
18. **Berman, J.W.**, Clayton, P.M., Lowes, L.N., Webster, D. (2012) “Resilient Steel Plate Shear Walls” ASCE/SEI Structures Congress, Chicago, IL, March 2012.
19. Weigand, J.M., Meissner, J.E., Francisco, T., **Berman, J.W.**, Fahnestock, L.A., and Liu, J. “Overview of AISC/NSF Structural Integrity Research and Preliminary Results.” ASCE/SEI Structures Congress, Chicago, IL, March 2012.
20. **Berman, J.W.**, Clayton, P.M., Lowes, L.N., Webster, D. (2012) “Development of a Resilient Steel Plate Shear Wall System” 9th International Conference on Urban Earthquake Engineering/ 4th Asia Conference on Earthquake Engineering, Tokyo Institute of Technology, Tokyo, Japan, March 2012.
21. **Berman, J.W.**, Clayton, P.M., Lowes, L.N., Webster, D., Fahnestock, L.A. (2011) “AISC and NEES Research Overview: Steel Slit Panels and Steel Plate Shear Walls.” North American Steel Construction Conference, Pittsburgh, PA, May 2011.
22. **Clayton, P.M.**, Dowden, D., Purba, R., Berman, J.W., Lowes, L.N., and Bruneau M. (2011) “Seismic Design and Analysis of Resilient Steel Plate Shear Walls.” ASCE/SEI Structures Congress, Las Vegas, NV, April 2011.
23. **Berman, J.W.**, Wang, B.S., Olson, A., Roeder, C.W., and Lehman, D.E. (2011) “Simple Check for Yielding in Truss Bridge Gusset Plate Connections” ASCE/SEI Structures Congress, Las Vegas, NV, April 2011.
24. Clayton, P.M., **Berman, J.W.**, Winkley, T., Lowes, L.N. (2011). “Development of a Self-Centering Steel Plate Shear Wall.” Proceedings of the Third Asia-Pacific Young Researchers and Graduate Symposium, Taipei, Taiwan, March, 2011.
25. **Clayton, P.M.**, Berman, J.W., Lowes, L.N. (2010). “Resilient Steel Plate Shear Walls: Analysis of Performance using OpenSEES and Teragrid Resources.” Quake Summit 2010, Joint PEER and NEES Annual Meetings, San Francisco, CA, October, 2010.
26. **Berman, J.W.**, Clayton, P.M., Lowes, L.N., Bruneau, M., Fahnestock, L.A., and Tsai, K.C. (2010) “Development of a Recentering Steel Plate Shear Wall and Addressing Critical Steel Plate Shear Wall Research Needs” Proceedings of the Joint 9th National Conference on Earthquake Engineering and 10th Canadian Conference on Earthquake Engineering, Toronto, CA, July 2010.
27. **Berman, J.W.**, Okazaki, T., and Hauksdottir, H.O. (2010) “Reduced Link Sections for Improving the Ductility of Eccentrically Braced Frame Link-to-Column Connections” Proceedings of the Joint 9th National Conference on Earthquake Engineering and 10th Canadian Conference on Earthquake Engineering, Toronto, CA, July 2010.
28. **Berman, J.W.**, Wang, B.S., Olson, A.W., Roeder, C.W., and Lehman, D.E., “Rapid Evaluation of Gusset Plates in Steel Truss Bridges.” FHWA Bridge Engineering Conference: Highways for LIFE and Accelerated Bridge Construction, Orlando, FL, April 2010.
29. Weigand, J.M. and **Berman, J.W.**, “Rotation and Strength Demands for Simple Connections to Support Large Vertical Deflections.” Proceedings of the ASCE/SEI Structures Congress, Austin, TX, April 2009.
30. **Weigand, J.M.** and Berman, J.W., “Rotation and Strength Demands for Simple Connections to Support Development of Catenary Action.” 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.

31. **Berman, J.W.** and Bruneau, M. “Development of Self-Stabilizing Links for Eccentrically Braced Frames.” 14th World Conference on Earthquake Engineering, Beijing, China, October 2008.
32. **Berman, J.W.**, Lowes, L.N., Okazaki, T., Bruneau, M., Tsai, K.C, Driver, R.G., and Sabelli, R., “Research Needs and Future Directions for Steel Plate Shear Walls.” Proceedings of the ASCE/SEI Structures Congress, Vancouver, BC, Canada, April 2008.
33. **Brown, D.L.** and Berman, J.W., “Fatigue, Ultimate, and Rail Capacity Comparison of Two Fiber Reinforced Polymer Bridge Decks.” ASCE/SEI Structures Congress, Vancouver, BC, Canada, April 2008.
34. **Bruneau, M.**, Berman, J.W., Qu, B., Warn, G.,P., Purba, R., Vian, D., (2007) “Experimental and Analytical Research on Behavior of Steel Plate Shear Walls”, Proceedings of the 76th Annual SEAOC Convention, Lake Tahoe, CA, September 2007.
35. **Berman, J.W.** and Bruneau, M. “Development of Self-Stabilizing Hybrid Rectangular Links for Eccentrically Braced Frames”, 5th National Seismic Conference on Bridges and Highways, San Francisco, CA, September 2006.
36. **Berman, J.W.** and Pollino, M., “The MCEER Student Leadership Council and Earthquake Engineering Education Activities”, 8th National Conference on Earthquake Engineering, San Francisco, CA, April 2006.
37. **Berman, J.W.** and Bruneau, M., “Proof-of-Concept Testing and Finite Element Modeling of Self-Stabilizing Hybrid Rectangular Links for Eccentrically Braced Frames”, 8th National Conference on Earthquake Engineering, San Francisco, CA, April 2006.
38. **Berman, J.W.** and Bruneau, M., “Seismic Response and Retrofit Design Recommendations for Steel Truss Bridge Piers”, 2005 New York City Bridge Conference, Bridge Engineering Association, New York, NY, September 2005.
39. **Berman, J.W.** and Bruneau, M., “Experimental Investigation of Light-Gauge Steel Plate Shear Walls”, KEERC-MCEER Joint Seminar on Contributions to Earthquake Engineering, Buffalo, NY, December 2002.

Professional society memberships

American Society of Civil Engineers (ASCE), 1998-present
 Earthquake Engineering Research Institute (EERI), 2000-present
 American Institute of Steel Construction (AISC), 1999-present
 Network for Earthquake Engineering Simulation (NEESinc.), 2004-present
 Consortium for Universities in Earthquake Engineering Research (CUREE), 2006-present

Other

Journal Papers Reviewed

Journal	'06	'07	'08	'09	'10	'11	
<i>Journal of Structural Engineering (ASCE)</i>	1	2	2	2	3	4	
<i>Engineering Structures</i>	2	2	1	1	2	2	
<i>Computer-Aided Civil and Infrastructure Engineering</i>	-	2					
<i>Engineering Journal (AISC)</i>	2	-					
<i>Journal of Constructional Steel Research</i>	-	1	1		1	1	
<i>Structural Engineering and Mechanics</i>		2					
<i>Canadian Journal of Civil Engineering</i>			1	1			
<i>Structural Dynamics and Earthquake Engineering</i>				2			

<i>Journal of Bridge Engineering</i>				2	4	2	
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Proposals Reviewed

Organization	'09	'10	'12	'13	
<i>National Science Foundation</i>	-	12	10	12	
<i>OTREC</i>	2	-			

GRADUATE STUDENTS

Chaired Doctoral Degrees

Student Name	MSCE Advisee	Year Started	Dissertation Title (Funding Agency)	Completed (Year)	Current Standing
Nasser Marafi (co-chair with Eberhard)	No	2014	Effects of Cascadia Subduction Earthquakes on Structures (NSF)	2017 (Expected)	
Patricia Clayton	Yes	2010	Resilient Steel Shear Walls: Analysis, Experimentation and Design (NSF)	2013	Assistant Professor, UT Austin, Starting 12/13
David Webster	No	2010	Coupled Steel Plate Shear Walls (NSF)	2013	Sargent and Lundy
Bo-Shiuan Wang (co-chair with Roeder)	No	2008	Assessment of Steel Truss Bridge Gusset Plates (WSDOT/Liao)	2013	Baukland and Taylor
Mohammad Malakutian	No	2008	An Unbraced Seismic Load Resisting System for Post-Event Rapid Return to Occupancy (NSF)	2013	Lecturer and Post-Doc (UW)
Jonathan Weigand	Yes	2008	Assessing the Robustness of Steel Gravity Frame Connections (AISC)	2014	Post-Doc at NIST (5/2014)

Chaired Masters Degrees

Student Name	Level of Supervision	Thesis/Paper Title (Funding Agency)	Completed (Year)	Current Employer
Ryan Ganey	Thesis	Resilient Seismic Load Resisting Concepts for Tall Wood Buildings	2015 (Expected)	
Molly Johnson (w/ Roeder and Lehman)	Thesis	Experimental Evaluation of Bolted Braced Frame Connections (NSF)	2014 (Expected)	
Daniel Sloat (w/ Roeder and Lehman)	Thesis	Experimental Evaluation of Deficient Braced Frame Connections (NSF/Valle)	2014 (Expected)	
Andrew Sen (w/ Roeder and Lehman)	Thesis	Evaluation of Weak-Beam Chevron Braced Frames (NSF)	2014 (Expected)	
Travis Corigliano	Thesis	Impact of Hammer Peening on Fatigue Life of Tube-to-Tube Connections (DCC, Inc.)	2012	MKA
Saura Jost	Thesis	Strength of Rivets in Older Steel Truss Bridges (WSDOT/TransNow)	2012	Meyer Borgman Johnson
Tyler Winkley	Thesis	Experimental Investigation of Resilient Steel Plate Shear Walls (NSF)	2011	WSDOT
Aaron Olson	Thesis	Rapid Assessment of Steel Truss Bridge Gusset Plates (WSDOT/FHWA)	2010	KPFF
Patricia Clayton	Thesis	Modeling Post-Tensioned Connections in Steel Plate Shear Walls (NSF/Valle)	2010	PhD Candidate

Mark Frymoyer	Thesis	Fatigue Life of Previously In-Service Luminaire Poles (WSDOT)	2009	WSDOT
Heiðrún Ösp Hauksdóttir	Thesis	Reduced Link Sections for Eccentrically Braced Frames (Valle)	2008	ELFA Engineers
David Brown	Thesis	The Fatigue, Strength, and Connection Performance Characteristics of Two Glass Fiber Reinforced Polymer Bridge Decks (David Evans and Associates, Inc.)	2008	PSM Consulting Engineers
Jonathan Weigand	Coursework		2008	PhD Candidate
Ingimar Jensson (co-chair with Miller)	Thesis	Rapidly Deployable Emergency Shoring for Collapse Prevention (Valle)	2007	ELFA Engineers

Other significant student supervision

Student Name	Level of Supervision	Thesis/Paper Title	Completed (Year)
Ph.D. Committees			
Adam Phillips	Dissertation	Committee Member, Virginia Tech Student (Chair-Eatherton)	2014
Daniel Borello	Dissertation	Committee Member, UIUC Student (Chair – Fahnestock)	2014
Jacob Dafni	Dissertation	Committee Member (Chair – Wartman)	2014 (expected)
Sam Sadaris	Dissertation	Committee Member (Chair – Kramer)	2014 (expected)
Keith Palmer	Dissertation	Committee Member (Chairs - Roeder, Lehman)	2012
Po-Chien Hsaio	Dissertation	Committee Member (Chair - Roeder)	2012
M.S. Committees			
Kael Martin	Thesis	Committee Member (Chair – Lundquist)	2012
Kenneth O’Neil	Thesis	Committee Member (Chair - Roeder)	2011
Arni Gunnarsson	Thesis	Committee Member (Chair - Lehman)	2011
Gudmundur Hannesson	Thesis	Committee Member (Chair - Lehman)	2011
Jordan Hague	Thesis	Committee Member (Chair - MacKenzie-Helwien)	2011
Todd Janes	Thesis	Committee Member (Chair - Stanton)	2011
Jason Lee	Thesis	Committee Member (Chair - Roeder)	2011
John Werner	Thesis	Committee Member (Chair - Stanton)	2010
Josef Taylor	Thesis	Committee Member (Chair - Stanton)	2009
Kelly Clark	Thesis	Committee Member (Chair - Roeder)	2008
Laila Cohagen	Thesis	Committee Member (Chair - Stanton)	2008
Jason Pang	Thesis	Committee Member (Chair - Eberhard)	2008
Jeff Walters	Thesis	Committee Member (Chair - Roeder)	2008
Ryan Thody	Thesis	Committee Member (Chair - Lehman)	2007
Danny Currit	Thesis	Committee Member (Chair - Miller)	2007
Brandon Kotulka	Thesis	Committee Member (Chair - Roeder)	2006
Undergraduate Research Supervision			
Kelli Slaven	NSF REU-Lab Research	Evaluation of Older Braced Frames (NSF)	2013
Scott Tetzlaff	NSF REU-Lab Research	Gravity Frame Connections under Collapse Loads (NSF/AISC)	2011
Ryan Ganney	NSF REU-Lab	Re-Centering Steel Plate Shear Walls-Phase II	2011

	Research		
Kael Martin	Lab Research	Instrumentation for Tree Monitoring (NSF-Lundquist)	2009
Natalie Low	Analytical Research	Damage States for SPSW (NSF)	2009
Todd Janes	Analytical Research	Damage States for SPSW (NSF)	2009
Aaron Olson	Analytical Research	Truss Bridge Gusset Plates (WSDOT)	2009
Jason Perkizas	Lab Research	Testing of Metals in Shear (HNTB)	2008-2009
Dean Chahim	Lab Research	Testing of Metals in Shear (HNTB)	2008
Rebekah Kwon	Lab Research	Fatigue Testing of GFRP Bridge Decks	2008
Jonathan Werner	Lab Research	Fatigue Testing of GFRP Bridge Decks	2008
Andy Kragt	Lab Research	Fatigue Testing of GFRP Bridge Decks	2007
Jeff Perotti	Lab Research	Field Monitoring of a GFRP Bridge Deck	2006

RESEARCH ACTIVITIES

Funded Research

Funding Agency	Title	Total Amount (Subcontracts)	UW Matching	Berman Amount	Role, Other Pi's, co-Pi's	Dates
NSF	NEESR Planning: Engineered Timber Structural Systems for Seismically Resilient Tall Buildings	\$440k		\$70k	Co-PI, PI Shing (Col. Mines), co-PIs: Van de Lindt (Col St), Dolan (WSU), Ricles (Lehigh), Sause (Lehigh)	1/14-1/16
NSF	Hazards SEES Type 2: Magnitude 9 Earthquake Scenarios - Probabilistic Modeling, Warnings, Response and Resilience in the Pacific Northwest	\$3,000k		\$200k	Co-PI, PI Vidale, co-PIs Abramson, Bostrom, Duvall	9/13-9/17
WSDOT	Determining the Cost/Benefit of Routine Maintenance Cleaning of Steel Bridges to Prevent Structural Deterioration: Supplement to Examine Bearings and Expansion Joints	\$89k		\$45k	Co-PI with co-PI Roeder (UW)	9/12-9/13
NSF	NEESR: Collaborative Developments for Rehabilitation of Vulnerable Braced Frames	\$1,000k (\$321 UCB)		\$200k	co-PI, PI Roeder, co-PI Lehman	5/12-5/15
DCC, Inc.	Fatigue Enhancement of Welded Pipe Connections with Pneumatic Impact Treatment	\$115k		\$115k	PI	1/12-8/12
NSF	REU Supplement for Structural Integrity of Steel Gravity Framing Systems	\$6k		\$6k	PI	7/11-9/11
NSF	REU Supplement for NEESR-SG: Smart and Resilient Steel Walls for Reducing Earthquake Impacts	\$6k		\$6k	PI	7/11-9/11
TransNow	Testing Older Riveted Connections in Steel Truss Bridges *Approved but center was dissolved	\$71k *Approved but center was dissolved		\$71k	PI	7/11-6/12

WSDOT	Determining the Cost/Benefit of Routine Maintenance Cleaning of Steel Bridges to Prevent Structural Deterioration	\$75k		\$50k	PI, co-PI Roeder (UW)	7/11-7/12
WSDOT/ TransNow	Evaluation of Gusset Plate Safety in Steel Truss Bridges	\$71k (\$51k TNow, \$20k WSDOT)		\$50k	PI, co-PI Roeder (UW), co-PI Lehman (UW)	7/10-7/11
NSF/AISC	Collaborative Research: Structural Integrity of Steel Gravity Framing Systems	\$100k (NSF)/\$30k (AISC-Materials)		\$130k	PI	7/10-6/13
FHWA/ WSDOT	Evaluation of Gusset Plate Connections in Steel Truss Bridges	\$115k		\$60k	PI, co-PI Roeder (UW), co-PI Lehman (UW)	1/09-1/10
HNTB, Inc.	Weld Testing for the New Gerald Desmond Bridge in Long Beach, CA	\$45k		\$45k	PI	6/10-12/10
HNTB, Inc.	Material Testing for the New Gerald Desmond Bridge in Long Beach, CA	\$43k		\$43k	PI	11/08 - 10/09
NSF	NEESR-SG: Smart and Resilient Steel Walls for Reducing Earthquake Impacts	\$1,513k (\$350k, U. Buff., \$322, UIUC, \$50k Seattle MESA)		\$441k	PI, co-PI Lowes (UW), co-PI Bruneau (U. Buff.), co-PI Fahnestock (UIUC)	10/08 - 10/12
NSF	NEESR-II: Toward Rapid Return to Occupancy in Unbraced Steel Frames	\$350k (\$104k, UW, \$32k, Cal St. LA)		\$104k	co-PI, PI Dusicka (Port. St. U.), co-PI Purishingie (Cal. St. LA)	10/08 - 10/11
WSDOT/ TransNow	Preliminary Investigation of Luminaire and Traffic Signal Pole Lifespan	\$77k		\$77k	PI (\$45k WSDOT, \$32k TransNow)	6/08-6/09
American Inst. of Steel Const.	AISC Faculty Fellowship: Enhancing the Integrity of Steel Gravity Frame Systems	\$120k		\$120k	PI	4/08-4/12
David Evans and Assoc., Inc.	Laboratory Fatigue and Strength Testing of FRP Bridge Decks	\$114k		\$114k	PI, co-PI Roeder (UW)	9/06-6/08
David Evans and Assoc., Inc.	Field Deflection Monitoring of FRP Bridge Decks	\$14k		\$14k	PI, co-PI Roeder (UW)	9/06-10/07
Totals		\$7394k		\$1961k		

Pending Proposals

Funding Agency	Title	Total Amount (Subcontracts)	University Matching	Berman Amount	Role, Other Pi's, co-Pi's	Dates
NSF	Investigating Seismically Induced Collapse: Establishing Experimental Evidence for Identifying Collapse in Numerical Analysis	\$340k		\$340k	PI	4/14-3/17
NSF	Investigating the Use of Passive Pitch Control in Marine Hydrokinetic Turbines	\$394k		\$180k	Co-PI, PI Motley (UW)	6/14-5/17

NSF	MRI: Acquisition of a 3D X-Ray Computed Tomography Scanner for Imaging of Large Size Infrastructure, Biological, and Mechanical Components	\$1,534k	\$511k	\$1,534k	PI, co-PI's Khbeis, Yang, Kramer, Storti (UW)	7/14-6/17
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DOCUMENTATION OF TEACHING EFFECTIVENESS

Courses Taught & Student Evaluations

Course	Title	Quarter	Credit Hrs	Enrollment	Evaluations? Response	Item 1	Item 3	Item 4	Average, Items 1-4
CEE 377	Intro. to Struct, Eng.	Winter, 2014	5	61	Yes	4.0	4.2	4.3	4.2
CEE 516	Earthquake Engineering II	Fall, 2013	3	12	Yes	4.0	4.8	4.0	4.4
CEE 456	Structural Analysis	Spring, 2013	5	63	Yes 51/63	4.7	4.9	4.9	4.8
CEE 513	Advanced Steel I	Winter, 2013	3	31	Yes 25/31	4.2	4.7	4.5	4.3
CEE 377	Intro. to Struct, Eng.	Autumn, 2012	5	51	Yes 41/51	4.3	4.8	4.6	4.5
CEE 220	Mechanics of Materials	Summer, 2012	4	10	Yes 8/10	4.1	4.2	4.1	4.1
CEE 220	Mechanics of Materials	Spring, 2012	4	196	Yes 151/196	4.2	4.3	4.3	4.3
CEE 513	Advanced Steel I	Winter, 2012	3	27	Yes 18/27	4.4	4.3	4.3	4.4
CEE 379	Elementary Structures I	Fall, 2011	3	51	Yes 46/51	4.6	4.7	4.8	4.6
CEE 379	Elementary Structures I	Winter, 2011	3	66	Yes 44/66	4.4	4.8	4.6	4.6
CEE 513	Advanced Steel I	Winter, 2011	3	32	Yes 25/32	4.2	4.3	4.1	4.2
CEE 379	Elementary Structures I	Fall, 2010	3	64	Yes 48/64	4.2	4.6	4.4	4.3
CEE 380	Elementary Structures II	Sp, 2010	3	61	Yes 49/61	4.4	4.4	4.7	4.5
CEE 498	Natural Hazards	Sp, 2010	3	19	Yes 13/19	4.3	4.3	4.5	4.4
CEE 513	Advanced Steel I	Wtr, 2010	3	25	Yes 23/25	4.0	3.9	3.9	4.0
CEE 498	Natural Hazards	Sp, 2009	3	17	Yes 12/17	3.7	4.0	4.3	4.0
CEE 513	Advanced Steel I	Wtr, 2009	3	21	Yes 18/21	4.4	4.7	4.4	4.4
CEE 454	Design of Timber Strct	Fall, 2008	3	45	Yes, 40/45	3.8	4.2	4.0	3.9
CEE 380	Elementary Structures II	Sp, 2008	3	45	Yes, 40/45	4.1	4.3	4.1	4.2

CEE 513	Advanced Steel I	Wtr, 2008	3	19	Yes, 19/19	4.0	4.2	3.9	4.1
CEE 380	Elementary Structures II	Sp, 2007	3	57	Yes, 50/57	4.0	4.4	3.9	4.1
CEE 513	Advanced Steel I	Wtr, 2008	3	18	Yes, 17/18	3.9	4.1	3.7	4.0

Supervision of Independent Study (Design Projects and Research)

Course	Title (Student Name)	Quarter	# of Students (Total Credit Hrs)
CEE 599	Cost-Benefits of Regular Steel Bridge Washing in Washington State	Spring 2013, Fall 2013	1 (6)
CEE 499	Fatigue Enhancement of TYK Joints with PIT Treatment (Kevin Martin)	Fall, 2012	1 (2)
CEE 499	Local Buckling of Rectangular CFT (Rachel Liberty with Dawn Lehman)	Fall, 2010	2 (3)
CEE 599	Stability of Steel Structures (Jonathan Weigand and Patricia Clayton)	Winter, 2010	2 (2)
CEE 599	Performance Based Design Tools for Steel Plate Shear Walls (Nicole Baldvins)	Summer, 2009	1 (3)
CEE 599	Performance Based Design Tools for Steel Plate Shear Walls (Natalie Low)	Fall, 2009	1 (3)
CEE 499	Performance Based Design Tools for Steel Plate Shear Walls (Todd Janes)	Spring, 2009	1 (3)
CEE 599	The Direct Analysis Method for Design of Steel Beam-Columns (Brandon McGoldrick)	Fall, 2008	1 (3)
CEE 499	Inelastic Analysis of Steel Moment Frames (Matt Green)	Winter, 2009	1 (3)

List of Other Teaching Contributions

Course Development

Course	Title	Quarter	# of Students (Total Credit Hrs)
CEE 498	Natural Hazards and the Built Environment (with Reed and Kramer)	Spring, 2009	17 (3)

Other

Advisor for 2 Summer Internship High School Students through the MESA Program (part of NSF NEES steel plate shear wall project and NSF steel gravity frame project), Summer 2012.

Advisor for 4 Summer Internship High School Students through the MESA Program (part of NSF NEES steel plate shear wall project and NSF steel gravity frame project), Summer 2011.

Advisor for 1 LSAMP student from Seattle Central Community College, Summer 2010.

Advisor for 2 Summer Internship High School Students through the MESA Program (part of NSF NEES steel plate shear wall project), Summer 2010.

Guest Lecturer for General Studies 197f: Engineering as a Humanitarian Pursuit, Fall 2009.

Advisor for 3 Summer Internship High School Students through the MESA Program (part of NSF NEES steel plate shear wall project), Summer 2009.

Advising Seattle University undergraduate students on design of steel plate shear walls (part of NSF NEES steel plate shear wall project), 2008-2009 Academic Year.

Proposal to College of Engineering with Mahoney, Acquisition of New Construction Materials Laboratory Equipment to Improve Undergraduate Education, \$50k, Awarded 5/08.

Other Supporting Documents

Teaching Awards, Nominations for Teaching Awards

SERVICE

Departmental service

Committee/Activity	Role/Contribution	Dates
Structural Research Laboratory	Director	Summer 2012-present
Faculty Lead for UW Hosting the National Student Steel Bridge Competition	Faculty Lead	Spring 2012-Spring 2013
Search Committee, Structural Engineering Faculty Position	Member	Fall 2010-Spring 2012
Curriculum Committee	Member	Fall 2010-Winter 2011
Undergraduate Admissions Committee	Member	Summer 2010-present
Search Committee, Structural/Geotech Faculty Position	Member	Fall 2009-Winter 2010
College of the Environment Committee	Structures Representative	Spring 2008-Spring 2009
UW Steel Bridge Team	Faculty Advisor	2007-present
Development of Proposal for Improving Undergraduate Lab Space	Co-PI with Mahoney	Winter 2008
Structures Laboratory, College Engineering Open House Activities	Member	Spring 2007, Spring 2008
Search Committee, Hydrology Research Faculty Position	Member	Spring 2007
Executive Committee	Assistant Professor Representative	2006-2007

College service

University service

Committee/Activity	Role/Contribution	Dates
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Grant Writing Workshop for PhD Students	Presenter	September 2012
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Professional society and other service

Committee/Activity	Role/Contribution	Dates
Session at 2013 ASCE Structures Congress: Advances in Steel Plate Shear Walls and Braced Frames	Proposer, Organizer and Chair	May, 2013
Session at 2012 ASCE Structures Congress: Seismic Innovations I	Proposer, Organizer and Chair	March, 2012
ASCE Journal of Structural Engineering	Associate Editor	1/2012-present
ASCE Journal of Structural Engineering, Special issue: “NEES – Advances in Earthquake Engineering”	Guest Associate Editor	6/2011-6/2013
Structural Engineering Institute, Technical Affairs Division, Seismic Effects Committee/ASCE	Member	9/2006-9/2012
Session at 2011 ASCE Structures Congress: Innovations in Steel Plate Shear Walls	Proposer, Organizer and Chair	April, 2011
Session at 2008 ASCE Structures Congress: International Advances in Steel Plate Shear Walls 1: Research	Proposer, Organizer and Chair	April, 2008
Session at 2008 ASCE Structures Congress: International Advances in Steel Plate Shear Walls 2: Design Codes and Applications	Proposer, Organizer and Chair	April, 2008

Community service

Committee/Activity	Role/Contribution	Dates
Support for 2 MESA Interns in the Structural Engineering Laboratory	Advisor (with Eberhard, Stanton, Roeder, Lehman)	Summer 2013
Support for 2 MESA Interns in the Structural Engineering Laboratory	Advisor (with Lowes)	Summer 2012
Support for 4 MESA Interns in the Structural Engineering Laboratory	Advisor (with Lowes)	Summer 2011
Support for 2 MESA Interns in the Structural Engineering Laboratory	Advisor (with Lowes)	Summer 2010
Structural Engineering Laboratory Tours, Presentations, and Educational Activities for Regional K-12 Students	Organizer	MESA Group 4/2009 ACE Mentoring Group 2/2010, 1/2009, 1/2008
Support for 3 MESA Interns in the Structural Engineering Laboratory	Advisor (with Lowes)	Summer 2009
ACE Mentoring Program	Annual Lecturer and Organizer of Structural Engineering Laboratory Experience	February 2009, 2010, 2011, 2012, 2013

**International, national or governmental service
 All other service**