JEFFREY W. BERMAN

Curriculum Vitæ

Civil and Environmental Engineering
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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
Professor, Department of Civil and Environmental Engineering, September 2018-present.

University of Washington, Seattle, WA
Associate Professor, Department of Civil and Environmental Engineering, September 2012-August 2018.

University of Washington, Seattle, WA
Assistant Professor, Department of Civil and Environmental Engineering, September 2006-August 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

Academic Engineer of the Year, 2019, Puget Sound Engineering Council.

Leon S. Moisseiff Award, 2017, American Society of Civil Engineers, for the paper "Full-scale Pseudo-dynamic Testing of Self-Centering Steel Plate Shear Walls" in the Journal of Structural Engineering

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

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, 2005, American Society of Civil Engineers, for the paper "Plastic Analysis and Design of Steel Plate Shear Walls" in the Journal of Structural Engineering

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 (Citations from Google Scholar)
[1] Graduate students advised or co-advised by Berman
[2] Visiting graduate students advised or co-advised by Berman
[3] Other UW graduate students not advised by Berman
[4] UW post-docs
[5] Other graduate students not advised by Berman
[6] UW faculty colleagues

1. Pei, S., Huang, D., Berman, J.W., Wichman, S.K. (2020). "Simplified Dynamic Model for Post-tensioned Cross-laminated Timber Rocking Walls." *Earthquake Engineering and Structural Dynamics*, https://doi.org/10.1002/eqe.3378

2. Marafi, N.A., Grant, A., Maurer, B.W., Rateria, G., Eberhard, M.O., Berman, J.W. (2020). "A generic soil velocity model that accounts for near-surface conditions and deeper geologic structure." *Soil Dynamics and Earthquake Engineering*, Volume 140, 2021, https://doi.org/10.1016/j.soildyn.2020.106461

3. Wartman, J., Berman, J., Bostrom, A., Miles, S., Olsen, M., Gurley, K.R., Irish, J., Lowes, L., Tanner, T., Dafni, J. and Grilliot, M. (2020). "Research needs, challenges, and strategic approaches for natural hazards and disaster reconnaissance." *Frontiers in Built Environment*, 6, p.182. https://doi.org/10.3389/fbuil.2020.573068

4. Berman, J.W., Wartman, J., Olsen, M., Irish, J., Miles, S., Tanner, T., Gurley, K.R., Lowes, L., Bostrom, A., Dafni, J. and Grilliot, M. (2020). "Natural Hazards Reconnaissance with the NHERI RAPID Facility." *Frontiers in Built Environment*, 6, p.185. https://doi.org/10.3389/fbuil.2020.573067

5. Kourehpaz, P, Molina Hutt, C, Marafi, NA, Berman, JW, Eberhard, MO. (2020). "Estimating economic losses of midrise reinforced concrete shear wall buildings in sedimentary basins by combining empirical and simulated seismic hazard characterizations." *Earthquake Engng Struct Dyn*. 2020; 1– 17. https://doi.org/10.1002/eqe.3325

6. Yang, T., Marafi, N.A. Calvi, P.M., Wiebe, R. Eberhard, M.O., Berman, J.W. (2020). "Accounting for spectral shape in a simplified method of analyzing friction pendulum systems." *Engineering Structures*, 222, https://doi.org/10.1016/j.engstruct.2020.111002.

7. Asada, H, Sen, AD, Li, T, Berman, JW, Lehman, DE, Roeder, CW. (2020). "Seismic performance of chevron-configured special concentrically braced frames with yielding beams." *Earthquake Engng Struct Dyn*. 1– 21. https://doi.org/10.1002/eqe.3320

8. Marafi, N. A., Makdisi, A. J., Eberhard, M. O., and Berman, J. W. (2020). "Design Strategies to Account for Effects of Sedimentary Basins on Reinforced Concrete Walls." *Earthquake Spectra*, In-press. https://doi.org/10.1177/8755293019899965

9. Marafi, N. A., Makdisi, A. J., Eberhard, M. O., and Berman, J. W. (2020). "Impacts of M9 Cascadia Subduction Zone Earthquake and Seattle Basin on Performance of RC Core Wall Buildings." *Journal of Structural Engineering*. https://doi.org/10.1061/(ASCE)ST.1943-541X.0002490

10. Roeder, C. W., Sen, A. D., Asada, H., Ibarra, S. M., Lehman, D. E., Berman, J. W., Tsai, K. C., Tsai, C. Y., Wu, A. C., Wang, K. J., and Liu, R. (2019). "Inelastic behavior and seismic design of multistory chevron-braced frames with yielding beams." *Journal of Constructional Steel Research*. https://doi.org/10.1016/j.jcsr.2019.105817.

11. Lin, C.P., Wiebe, R., Berman J.W. (2019). "Analytical and Numerical Study of Curved-Base Rocking Walls." *Engineering Structures*, 197, https://doi.org/10.1016/j.engstruct.2019.109397

12. Roeder, C.W., Sen, A.D., Terpstra, C., Ibarra, S.M., Liu, R., Lehman, D.E., and Berman, J.W. (2019). "Effect of Beam Yielding on Chevron Braced Frames." *Journal of Constructional Steel Research*, 159, 428-441. https://doi.org/10.1016/j.jcsr.2019.04.044

13. Sen, A. D., Roeder, C. W., Lehman, D. E., and Berman, J. W. (2019). "Nonlinear modeling of concentrically braced frames." *Journal of Constructional Steel Research*, 157. https://doi.org/10.1016/j.jcsr.2019.02.007

14. Li, T., Marafi, N. A., Sen, A. D., Berman, J. W., Eberhard, M. O., Lehman, D. E., and Roeder C. W. (2019). "Seismic Performance of Special Concentrically Braced Frames in Deep Basin during Subduction Zone Earthquakes." *Engineering Structures*, 188, 87-103 https://doi.org/10.1016/j.engstruct.2019.02.057

15. Marafi, N. A., Eberhard, M. O., Berman, J. W., Wirth, E.A., & Frankel, A. D. (2019). "Impacts of M9 Cascadia Subduction Zone Earthquake on Idealized Systems." *Earthquake Spectra*. Vol. 35, No.3, pp 1261-1287. https://doi.org/10.1193/052418EQS123M

16. Pei, S., van de Lindt, J.W., Barbosa, A.R., Berman , J.W, McDonnell, E., Dolan, J.D., Blomgren, H., Zimmerman, E., Huang, D., Wichman, S. (2019). "Experimental seismic response of a resilient two-story mass timber building with post-tensioned rocking walls" *Journal of Structural Engineering*. Vol. 145, No. 11. https://doi.org/10.1061/(ASCE)ST.1943-541X.0002382

17. Li, T.[2], **Berman, J.W.**, Wiebe, R.[6] (2017). "Parametric Study of Seismic Performance of Structures with Multiple Rocking Joints." *Engineering Structures*, 146(1), 75-92. https://doi.org/10.1016/j.engstruct.2017.05.030 . (Impact Factor: 1.893)

18. Marafi, N.A.[1], Eberhard, M.O.[6], **Berman, J.W.**, Wirth, E.A.[4], and Frankel, A.D.[6] (2017). "Effects of Deep Basins on Structural Collapse During Large Subduction Zone Earthquakes." *Earthquake Spectra*, 33(3), 963-997. https://doi.org/10.1193/071916EQS114M (Impact Factor: 2.298, Cit. 1)

19. Ganey, R.[1], **Berman, J.W.**, Akbas, T., Loftus, S.[5], Dolan, J.D., Sause, R., Ricles, J.M., Pei, S., van de Lindt, J.W., Blomgren, H.E. (2017). "Experimental Investigation of Self-Centering Cross Laminated Timber Walls." *Journal of Structural Engineering*, 143(10). https://doi.org/10.1061/(ASCE)ST.1943-541X.0001877 (Impact Factor: 1.7, Cit. 0)

20. Sen, A. D.[1], Swatosh, M. A.[1], Ballard, R.[1], Sloat, D.[1], Johnson, M. M.[1], Roeder, C. W.[6], Lehman, D. E.[6], and **Berman, J.W.** (2017). "Development and Evaluation of Seismic Retrofit Alternatives for Older Concentrically Braced Frames." *Journal of Structural Engineering*, 143(5). http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001738 (Impact Factor: 1.7, Cit. 0)

21. Akbas, T. [5], Sause, R., Ricles, J.M., Ganey, R. [1], **Berman, J.W**., Loftus, S. [5], Dolan, J.D., Pei, S., van de Lindt, J.W., Blomgren, H.E. (2017). "Analytical and Experimental Lateral Load Response of Self-Centering CLT Walls." *Journal of Structural Engineering*, ASCE, 143(6) http://ascelibrary.org/doi/10.1061/%28ASCE%29ST.1943-541X.0001733. (Impact Factor: 1.7, Cit. 1)

22. Sarti, F. [2], Palermo, A., Pampanin, S, **Berman, J.W.** (2017). "Determination of the Seismic Performance Factors for Post-Tensioned Rocking Timber Wall Systems." *Earthquake Engineering and Structural Dynamics*, 46(2), 181-200, http://onlinelibrary.wiley.com/doi/10.1002/eqe.2784/full (Impact Factor: 2.127, Cit. 0)

23. Sen, A.D. [1], Sloat, D. [1], Ballard, R. [1], Johnson, M.M. [1], Roeder, C.W.[6], Lehman, D.E.[6], **Berman, J.W.** (2016). "Experimental Evaluation of the Seismic Vulnerability of Braces and Connections in Older Concentrically Braced Frames." *Journal of Structural Engineering*, ASCE, 142(9), http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29ST.1943-541X.0001507 (Impact Factor: 1.7, Cit. 2)

24. Clayton, P.M.[1], Dowden, D.M.[5], Li, C.H., **Berman, J.W.**, Bruneau, M., Lowes, L.N.[6], Tsai, K.C. (2016). "Self-Centering Steel Plate Shear Walls for Improving Seismic Resilience." *Frontiers of Structural and Civil Engineering*, 10(3), 283-290. http://dx.doi.org/10.1007/s11709-016-0344-z (Impact Factor: 1.7, Cit. 2)

25. Sen, A.D. [1], Roeder, C.W.[6], **Berman, J.W.**, Lehman, D.E.[6], Tsai, K.C., Li, C.H. [5], and Wu, A.C.[5] (2016). "Experimental Investigation of Chevron Concentrically Braced Frames with Yielding Beams." *Journal of Structural Engineering*, ASCE, 142(12), http://ascelibrary.org/doi/full/10.1061/%28ASCE%29ST.1943-541X.0001597 (Impact Factor: 1.7, Cit. 6)

26. Weigand, J.M. [1], and **Berman, J.W.**, (2016). "Integrity of Bolted Angle Connections Subjected to Simulated Column Removal." *Journal of Structural Engineering*, ASCE, 142(3), http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001429. (Impact Factor: 1.7, Cit. 8)

27. Marafi, N. [1], **Berman, J.W.**, and Eberhard, M.[6], (2016). "Ductility Dependent Intensity Measure that Accounts for Ground Motion Spectral Shape and Duration." *Earthquake Engineering and Structural Dynamics*, 45(4), 653-672, http://onlinelibrary.wiley.com/doi/10.1002/eqe.2678/abstract. (Impact Factor: 2.127, Cit. 6)

28. Dowden, D. [5], Clayton, P.M. [1], Li, C.H., **Berman, J.W.**, Bruneau, M., Lowes, L.N.[6], and Tsai, K.C. (2016). "Full-scale Pseudo-dynamic Testing of Self-Centering Steel Plate Shear Walls." *Journal of Structural Engineering*, ASCE, 142(1), http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001367. (Impact Factor: 1.7, Cit. 6)

29. Malakoutian M. [1], Berman J.W., Dusicka P., and Lopes, A.[5] (2016). "Quantification of LCF Seismic Performance Factors for Use in Seismic Design." *Journal of Earthquake Engineering*, 20(4), 535-558, http://dx.doi.org/10.1080/13632469.2015.1104750 (Impact Factor: 0.922, Cit. 1)

30. Vatansever, C. [2], and **Berman, J.W.**, (2015). "Analytical Investigation of Thin Steel Plate Shear Walls with Screwed Infill Plate." *Steel and Composite Structures, An International*

Journal, 19(5), 1145-1165, http://dx.doi.org/10.12989/scs.2015.19.5.1145 (Impact Factor: 1.796, Cit. 3)

31. Clayton, P.M. [1], Tsai, C.Y. [2], **Berman, J.W.**, and Lowes, L.N.[6], (2015). "Comparison of Web Plate Numerical Models for Self-Centering Steel Plate Shear Walls." *Earthquake Engineering and Structural Dynamics*, 44(12), 2093–2110, http://dx.doi.org/10.1002/eqe.2578. (Impact Factor: 2.127, Cit. 6)

32. Clayton, P.M. [1], **Berman, J.W.**, and Lowes, L.N.[6], (2015). "Seismic Performance of Self-Centering Steel Plate Shear Walls with Beam-Only-Connected Web Plates." *Journal of Constructional Steel Research*, Vol. 106, pp. 198-208, http://dx.doi.org/10.1016/j.jcsr.2014.12.017. (Impact Factor: 1.702, Cit. 14)

33. Lehman, D.E.[6], Kuder, K.G., Gunnerrson, A.K. [1], Roeder, C.W., and **Berman, J.W.**[6] (2015). "Circular Concrete Filled Tubes for Improved Sustainability and Seismic Resilience." *Journal of Structural Engineering*, ASCE, 141(3), SPECIAL ISSUE: Sustainable Building Structures, http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001103 (Impact Factor: 1.7, Cit. 2)

34. Weigand, J.M. [1] and **Berman, J.W.** (2014). "Integrity of Single Plate Shear Connections Subjected to Simulated Column Collapse Loading." *Journal of Structural Engineering*, ASCE, Vol 140, No. 5, http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000935 (Impact Factor: 1.7, Cit. 20)

35. Webster D.J. [1], **Berman J.W.**, and Lowes L.N.[6] (2014). "Experimental Investigation of SPSW Web Plate Stress Field Development and Vertical Boundary Element Demand." *Journal of Structural Engineering*, ASCE, Vol. 140, No 6. http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000989 (Impact Factor: 1.7, Cit. 8)

36. Clayton, P.M. [1], **Berman, J.W.**, and Lowes, L.N.[6] (2013). "Subassembly Testing and Modeling of Self-Centering Steel Plate Shear Walls." *Engineering Structures*, Vol. 56, pp. 1848-1857. http://dx.doi.org/10.1016/j.engstruct.2013.06.030 (Impact Factor: 1.893, Cit. 22)

37. Martin, K. [3], Van Stan, J.T., Dickerson-Lange, S.E. , Lutz, J. , **Berman, J.W.**, Gersonde, R. , and Lundquist, J.D.[6] (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 (Impact Factor: 3.792, Cit. 18)

38. Malakoutian, M. [1], **Berman, J.W.**, and Dusicka, P. (2013) "Seismic Response Evaluation of the Linked Column Frame System." *Earthquake Engineering and Structural Dynamics*, Vol. 42, No. 6, pp. 795-814. http://dx.doi.org/10.1002/eqe.2245 (Impact Factor: 2.127, Cit. 23)

39. **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. (Impact Factor: 1.371 (2014), Cit. 1)

40. Liu, S. [5], Warn, G.P., and **Berman, J.W.** (2013) "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 (Impact Factor: 1.7, Cit. 3)

41. Hsiao, P.C.[3], Lehman, D.E.[6], **Berman, J.W.**, Roeder, C.W.[6], and Powell, J. [3] (2012). "Seismic Vulnerability of Older Braced Frames." *Journal of Performance of Constructed Facilities* 28(1), 108-120. http://dx.doi.org/10.1061/(ASCE)CF.1943-5509.0000394 (Impact Factor: 0.893, Cit. 8)

42. Weigand, J.M. [1] 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 (Impact Factor: 1.702, Cit. 3)

43. Kuder, K., Lehman, D.E.[6], **Berman, J.W.**, Hannesson, G. [1], 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 (Impact Factor: 2.421, Cit. 63)

44. Baldvins, N. [1], **Berman, J.W.**, Lowes, L.N.[6], Low, N. [1], and Janes, T. [1] (2012) "Fragility Functions for Steel Plate Shear Walls." *Earthquake Spectra*, EERI, Vol 28, No. 2, May 2012. http://dx.doi.org/10.1193/1.4000003 (Impact Factor: 2.298, Cit. 9)

45. **Berman, J.W.**, Wang, B.S. [1], Olson, A. [1], Roeder, C.W.[6], and Lehman, D.E.[6], (2011) "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 (Impact Factor: 1.069, Cit. 10)

46. Clayton, P.M. [1], **Berman, J.W.**, Lowes, L.N.[6] (2011) "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 (Impact Factor: 1.7, Cit. 33)

47. Clayton, P.M. [1], Winkley, T. [1] **Berman, J.W.**, Lowes, L.N.[6] (2011) "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 (Impact Factor: 1.7, Cit. 31)

48. **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 (Impact Factor: 1.893, Cit. 81)

49. **Berman, J.W.**, Hauksdottir, H.O.[1], 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 (Impact Factor: 1.7, Cit. 16)

50. Brown, D.L.[1] 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 (Impact Factor: 1.069, Cit. 15)

51. **Berman, J.W.** and Brown, D.L. [1] (2009) "Field Monitoring and Repair 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 (Impact Factor: 0.893, Cit. 12)

52. **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 (Impact Factor: 1.7, Cit. 37)

53. **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. (Impact Factor: 1.371 (2014), Cit. 65)

54. **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) (Impact Factor: 1.7, Cit. 8)

55. **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) (Impact Factor: 1.7, Cit. 11)

56. **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 (Impact Factor: 1.893, Cit. 58)

57. Bruneau, M., **Berman, J.W.**, Lopez-Garcia, D.[5], and Vian, D.[5] (2007) "A Review of Steel Plate Shear Wall Design Requirements and Research." *Engineering Journal*, AISC, Vol. 44, No. 1, pp. 27-34. (Impact Factor: 1.371 (2014), Cit. 9)

58. **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 (Impact Factor: 2.127, Cit. 8)

59. **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 (Impact Factor: 1.893, Cit. 56)

60. 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) (Impact Factor: 1.7, Cit. 17)

61. **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) (Impact Factor: 1.7, Cit. 135)

62. **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. (Impact Factor: 1.371 (2014), Cit. 38)

63. **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) (Impact Factor: 1.7, Cit. 204)

64. Warn, G.[5], **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 (Impact Factor: 0.898, Cit. 3)

Note: after 2013 the ASCE Journal of Structural Engineering ceased issuing page numbers

Conference proceedings and other non-journal articles
Fully refereed publications

1. Berman, J.W., Terpstra, C., Ibarra, S., Sen, A.D., Liu, R., Li, T., Lehman, D.E., Roeder, C.W. (2018) "Chevron Braced Frames with Yielding Beams: Experiments and Numerical Analysis." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.
2. Wichman, S., Berman, J.W., Pei, S., van de Lindt, J., Barbosa, A., Dolan, J.D., McDonnell, E., Zimmerman, R.B. (2018) "Dynamic Testing of Multi-Story Rocking Cross Laminated Timber Walls." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.
3. Marafi, N., Eberhard, M.O., Berman,, J.W., Wirth, E., Frankel, A., and Vidale, J. (2018) "Effects of Simulated Ground Magnitude 9 Earthquake Motions on Structures in the Pacific Northwest." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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.

10. 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.

Refereed by abstract only

1. Zagedimazandarani S., Molina-Hutt, C., Marafi. N. A., Eberhard, M. O., Berman, J. W. (2019) Collapse Risk of Tall Steel Moment-Resisting Frames in Deep Sedimentary Basins during Large Magnitude Subduction Earthquakes, 12th Canadian Conference on Earthquake Engineering, Quebec, QC, Canada, abstract accepted.
2. Eberhard, M. O., Berman, J. W., Marafi, N., de Zamacona-Cervantes G., Grant A., Maurer, B. W., Frankel, A., Wirth, E., and Khaleghi, B. (2019) Effects of Cascadia Subduction Zone M9 Earthquakes on Bridges. The Third International Bridge Seismic Workshop (IABEE).
3. Berman, J., Marafi, N., Eberhard, M. (2019) Effects of Simulated Magnitude 9 Earthquake Motions on RC Wall Structures in the Pacific Northwest. Engineering Mechanics Institude Conference 2019, Pasadena, California. June 20th, 2019
4. Marafi, N., Berman, J., and Eberhard, M. (2019) Effects of Simulated Magnitude 9 Earthquake Motions on Reinforced Concrete Wall Structures in the Pacific Northwest. Seismic Society of America Annual Meeting 2019, Seattle, WA.
5. Berman, J.W., Wartman, J.W., Olsen, M.J., Irish, J., Lowes, L.N., Gurley, K,. Tanner, T. Miles, S.B., Bostrom, A. (2019) "The NHERI RAPID Facility: Enabling the Next-Generation of Natural Hazards Reconnaissance." The Third International Bridge Seismic Workshop (IABEE).
6. Yang. T., Marafi. N. A., Calvi, P. M., Wiebe, R., Eberhard, M. O., Berman, J. W. (2019) Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures, 12th Canadian Conference on Earthquake Engineering, Quebec, QC, Canada, abstract accepted.
7. Pei, S., van de Lindt, J., Barbosa, A., Berman, J., McDonnel, E., Dolan, D., Zimmerman, R., Sause, R., Ricles, J., Ryan, K. (2018). "Full-Scale Shake Table Test of Mass-Timber Building with Resilient Post-Tensioned Rocking Walls." 2018 World Timber Conference, Seoul, Korea, August, 2018.
8. Wartman, J., Bostrom, A., Miles, S., Tanner, T., Berman, J., and Dafni, J. (2018). "Enabling Citizen Science with the Natural Hazards Reconnaissance Facility." AGU Fall Meeting Abstracts, San Francisco, CA, December 2018.
9. Berman, J.W., Roeder, C.W., Lehman, D.E., Terpstra, C., Ibarra, S., Sen, A.D. (2018) "The Behavior of Chevron Braced Frames with Yielding Beams." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
10. Wartman, J.W., Berman, J.W. (2018) "The NHERI RAPID Facility: Enabling the Next-Generation of Natural Hazards Reconnaissance." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
11. Sen, A.D., Roeder, C.W., Lehman, D.E., Berman, J.W. (2018) "Seismic Performance Evaluation of Older and Retrofitted Concentrically Braced Frames using Nonlinear Response-History Analysis." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
12. Marafi, N.A., Eberhard, M.O., Berman, J.W. (2018) "Impacts of Deep Sedimentary Basins on Reinforced Concrete Walls During Subduction Zone Earthquakes." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
13. Marafi, N. A., Berman, J. W., Eberhard, M. O., Wirth, E. A., Frankel A. D., and Vidale, J. E. (2017) "Effects of Simulated Magnitude 9 Earthquake Motions on Structures in the Pacific Northwest." 2017 Annual Meeting Seismological Society of America, Denver, Colorado, April 2017

14. Sen, A.D., Roeder, C.W., Berman, J.W., Lehman, D.E. (2017) “Numerical Study on Enhanced Seismic Performance for Vulnerable Concentrically Braced Frame.” ASCE/SEI Structures Congress, Denver, CO, April 2017.
15. Marafi, N. A., Eberhard, M. O., and Berman, J. W. (2017) “Effects of the Yufutsu Basin on Structural Response during Subduction Earthquakes.” 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
16. Marafi, N. A., Berman, J. W., and Eberhard, M. O. (2017) “A New Intensity Measure that Accounts for the effects of Spectral Acceleration, Duration, and Spectral Shape.” 116th World Conference on Earthquake Engineering, Santiago, Chile, January 2017
17. Sen, A. D., Roeder, C. W., Berman, J. W., Lehman, D. E., Tsai, K. C., Li, C. H., and Wu, A. C. (2017). “Seismic Performance of Chevron Braced Frames with Yielding Beams.” Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
18. Sen, A. D., Swatosh, M., Sloat, D., Johnson, M., Ballard, R., Berman, J. W., Lehman, D. E., and Roeder, C. W. (2017). “Seismic Vulnerability and Rehabilitation of Older Concentrically Braced Frames.” Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
19. Ganey, R., Berman, J.W., Akbas, T., Loftus, S., Dolan, J.D., Sause, R., Ricles, J., Pei, S., van de Lindt, J., Blomgren, H.E. (2016). “Experimental Investigation of Self-Centering Cross-Laminated Timber Walls.” World Conference on Timber Engineering, Vienna, Austria, August 2016.
20. Berman, J.W., Weigand, J.M. (2016). “Steel Gravity Connections Subjected to Large Rotations and Axial Loads.” AISC Steel Connections VIII, Boston, MA, April 2016.
21. Lehman, D. E., Sen, A. D., Roeder, C. W., and Berman, J. W. (2016). “Performance of Special and Non-Seismic Concentrically Braced Frames.” 2016 SEAOC Convention Proceedings, Maui, HI, October 2016.
22. Sen, A. D., Ballard, R., Sloat, D., Johnson, M. M., Roeder, C. W., Lehman, D. E., and Berman, J. W. (2015). “Evaluation and Retrofit of Older Concentrically Braced Frames.” Proceedings of the 2nd ATC-SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA, December 2015.
23. Roeder, C. W., Lehman, D. E., Berman, J. W., and Sen, A. D. (2015). “Seismic Performance Evaluation of Concentrically Braced Steel Frames.” Proceedings of the 8th International Symposium on Steel Structures, Jeju, Korea, November 2015.
24. Sarti, F., Palermo S., and Berman, J., (2014) Evaluation of the Seismic Performance Factors of Port-Tensioned Timber Wall Systems.” Second European Conference on Engineering and Seismology, Istanbul, August, 2014
25. Pei, Shiling; Berman, Jeffrey; Dolan, Daniel; van de Lind, J; Ricles, James; Sause, Richard; Blomgren, Hans-Erik; Popovski, Marjan; Rammer, Douglas; (2014) “Progress on the Development of Seismic Resilient Tall CLT Buildings in the Pacific Northwest.” Proceedings of the 2014 World Conference on Timber Engineering, Quebec City, Canada
26. 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.
27. 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
28. 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

29. 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
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. 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.
37. 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.
38. Clayton, P.M., Dowden, D.M., Winkley, 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.
39. 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.
40. 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.
41. 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.
42. 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.
43. 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.

44. 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.
45. 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.
46. 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.
47. 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.
48. 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.
49. 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.
50. 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.
51. 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.
52. 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.
53. 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.
54. 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.
55. 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.
56. 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.
57. 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.
58. 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.

59. 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.
60. 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.
61. 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.
62. 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.
63. 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*
64. 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.
65. 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.
66. 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.
67. 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.
68. 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.
69. 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.
70. 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.
71. 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.
72. 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.
73. 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

None

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

None

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

None

Abstracts, letters, non-refereed papers, technical reports
Technical reports

1. Pei, S., van de Lindt, J.W., Popovski, M., Berman, J.W., Dolan, J.D., Ricles, J.M., Sause, R., Blomgren, H.E., and Rammer, D.R. (2014). "Cross Laminated Timber for Seismic Regions: Progress and Challenges for Research and Implementation." *Journal of Structural Engineering*, ASCE, Forum Paper, 142(4), http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0001192. (Impact Factor: 1.7, Cit. 11)
2. Sen, A. D., Roeder, C. W., Lehman, D. E., and Berman, J. W. (2015). "How Big Is That Beam? Revisited." Structure Magazine, pp. 27-29, July 2015.
3. Berman, J.W. (2014). "Advances in Steel Plate Shear Walls." Structure Magazine, pp. 26-28, September 2014.
4. 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 (Impact Factor: 1.7, Cit. 0)
5. Berman, J.W., Burgdorfer, R., and Roeder, C.W. (2013) "Standard Practice for Washing and Cleaning Concrete Bridge Decks and Substructure Bridge Seats Including Bridge Bearings and Expansion Joints to Prevent Structural Deterioration." Report *WA-RD 811.2*, Washington State Department of Transportation, Olympia, WA.
6. 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.

7. 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.
8. 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.
9. 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.
10. Berman, J.W. (2009). "Testing of Nucor A36 Low Carbon Steel under Cyclic Axial and Shear Strain" Report to Sponsor: HNTB Corporation, Bellevue, WA.
11. 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.
12. 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.
13. 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.
14. 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.
15. 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.
16. 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.
17. 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. Effects of Simulated Magnitude 9 Earthquake Motions on RC Wall Structures in the Pacific Northwest, Colorado School of Mines, January 2020.

2. The M9 Project: Predicted Structural Response to M9 Cascadia Ground Motions, Structural Engineers Association of Washington, Dinner Meeting, March 2019 (w/ Eberhard).
3. The M9 Project: Predicted Structural Response to M9 Cascadia Ground Motions, Washington State Seismic Safety Committee, January 2019.
4. The NHERI RAPID Facility, NHERI Users Workshop, UC San Diego, December 2018.
5. Estimating the Impact of Magnitude 9 Cascadia Subduction Zone Earthquakes on Seattle Buildings Using Simulated Ground Motions, Pacific Earthquake Engineering Research Center Annual Meeting, Berkeley, CA, January, 2018.
6. The NHERI Rapid Facility, NHERI-E-Defense Meeting, Tokyo, Japan, October, 2017
7. The NHERI Rapid Facility, NHERI Users Workshop at Lehigh University, December, 2016
8. The NHERI Rapid Facility, NHERI Users Workshop at the University of California, San Diego, December, 2016
9. Response of Structures to Large Subduction Zone Earthquakes: Life in Cascadia, Washington Professional Engineers Association, November, 2016
10. Engineering Solutions for a Seismically Resilient Seattle, College of Engineering Lecture Series, University of Washington, October, 2016
11. Characterizing the Response of Structures to Large Subduction Zone Earthquakes, Tsukuba Global Science Week, Tsukuba University, Tsukuba Japan, September, 2015
12. Cascadia Megathrust Earthquakes: Reducing Risk through Science, Engineering and Planning, Opening Keynote, Structural Engineers Association of California Convention, Bellevue, WA, September, 2015.
13. Advances in Steel Plate Shear Walls, Structural Engineers Association of Washington. Seattle, WA, September, 2015.
14. The M9 Project, Earthquake Engineering Committee, Structural Engineers Association of Washington. Seattle, WA, June, 2014.
15. 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)
16. Pennsylvania State University, Structural Engineering Seminar, *Recent Advances in Steel Plate Shear Walls*, April 2013.
17. University of British Columbia, Structural Engineering Seminar, *UW Earthquake Engineering Research and NEES Steel Plate Shear Walls Research*, December 2010
18. University of Illinois, Structural Engineering Seminar, *NEES Steel Plate Shear Walls Research*, October 2010
19. Washington State Department of Transportation, *Triage Evaluation of Gusset Plates in Steel Truss Bridge – A Workshop for WSDOT Consultants*, Olympia, WA, May 2010.
20. AASHTO Bridge Task Force T-14, *A Triage Procedure for the Rapid Assessment of Steel Truss Bridge Gusset Plates*, Orlando, FL, January 2010
21. 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).
22. Washington State Department of Transportation, *Fatigue Life of Luminaire and Traffic Signal Poles*, July 2008.
23. ASCE/SEI Structures Congress, Vancouver, BC, *Research Needs and Future Directions for Steel Plate Shear Walls*, April, 2008.
24. National Center for Earthquake Engineering Research, Taipei, Taiwan, *Unconstrained Gusset Connections for Buckling Restrained Braced Frames*, November 2007
25. National Center for Earthquake Engineering Research, Taipei, Taiwan, *Development of Tubular Links for Eccentrically Braced Frames*, November 2007
26. 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

27. Washington State Department of Transportation, *Bridge Engineering Research and Future Projects*, October 2006.
28. 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. (Presenter in bold)

1. Marafi, N., **Berman, J.W.**, Eberhard, M.O. (2020). "Effects of Simulated Magnitude 9 Earthquake Motions on RC Wall Structures in the Pacific Northwest." American Academy for the Advancement of Science, Annual Conference, Seattle, WA.
2. **Wichman, S.**, and Berman, J. (2020). "Dynamic Analysis of Multi-Story Rocking Cross Laminated Timber Walls." *2020 National Earthquake Conference*, San Diego, CA.
3. **Wichman, S.**, and Berman, J. (2019). "Dynamic Testing of Multi-Story Rocking Cross Laminated Timber Walls." *2019 PEER Annual Meeting*, Los Angeles, California.
4. Zagedimazandarani S., **Molina-Hutt, C.**, Marafi. N. A., Eberhard, M. O., Berman, J. W. (2019) Collapse Risk of Tall Steel Moment-Resisting Frames in Deep Sedimentary Basins during Large Magnitude Subduction Earthquakes, 12th Canadian Conference on Earthquake Engineering, Quebec, QC, Canada.
5. Eberhard, M. O., Berman, J. W., **Marafi, N.**, de Zamacona-Cervantes G., Grant A., Maurer, B. W., Frankel, A., Wirth, E., and Khaleghi, B. (2019) Effects of Cascadia Subduction Zone M9 Earthquakes on Bridges. The Third International Bridge Seismic Workshop (IABEE).
6. Berman, J., **Marafi, N.**, Eberhard, M. (2019) Effects of Simulated Magnitude 9 Earthquake Motions on RC Wall Structures in the Pacific Northwest. Engineering Mechanics Institude Conference 2019, Pasadena, California. June 20th, 2019
7. **Marafi, N.**, Berman, J., and Eberhard, M. (2019) Effects of Simulated Magnitude 9 Earthquake Motions on Reinforced Concrete Wall Structures in the Pacific Northwest. Seismic Society of America Annual Meeting 2019, Seattle, WA.
8. **Berman, J.W.**, Wartman, J.W., Olsen, M.J., Irish, J., Lowes, L.N., Gurley, K,. Tanner, T. Miles, S.B., Bostrom, A. (2019) "The NHERI RAPID Facility: Enabling the Next-Generation of Natural Hazards Reconnaissance." The Third International Bridge Seismic Workshop (IABEE).
9. **Yang. T.**, Marafi. N. A., Calvi, P. M., Wiebe, R., Eberhard, M. O., Berman, J. W. (2019) Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures, 12th Canadian Conference on Earthquake Engineering, Quebec, QC, Canada, abstract accepted.
10. **Pei, S.**, van de Lindt, J., Barbosa, A., Berman, J., McDonnel, E., Dolan, D., Zimmerman, R., Sause, R., Ricles, J., Ryan, K. (2018). "Full-Scale Shake Table Test of Mass-Timber Building with Resilient Post-Tensioned Rocking Walls." 2018 World Timber Conference, Seoul, Korea, August, 2018.
11. **Wartman, J.**, Bostrom, A., Miles, S., Tanner, T., Berman, J., and Dafni, J. (2018). "Enabling Citizen Science with the Natural Hazards Reconnaissance Facility." AGU Fall Meeting Abstracts, San Francisco, CA, December 2018.
12. **Berman, J.W.**, Terpstra, C., Ibarra, S., Sen, A.D., Liu, R., Li, T., Lehman, D.E., Roeder, C.W. (2018) "Chevron Braced Frames with Yielding Beams: Experiments and Numerical Analysis." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.
13. **Wichman, S.**, Berman, J.W., Pei, S., van de Lindt, J., Barbosa, A., Dolan, J.D., McDonnell, E., Zimmerman, R.B. (2018) "Dynamic Testing of Multi-Story Rocking Cross Laminated Timber Walls." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.

14. Marafi, N., Eberhard, M.O., **Berman, J.W.**, Wirth, E., Frankel, A., and Vidale, J. (2018) "Effects of Simulated Ground Magnitude 9 Earthquake Motions on Structures in the Pacific Northwest." 11th National Conference on Earthquake Engineering, Los Angeles, CA, June 2018.
15. Berman, J.W., Roeder, C.W., Lehman, D.E., Terpstra, C., Ibarra, S., **Sen, A.D.** (2018) "The Behavior of Chevron Braced Frames with Yielding Beams." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
16. Wartman, J.W., **Berman, J.W.** (2018) "The NHERI RAPID Facility: Enabling the Next-Generation of Natural Hazards Reconnaissance." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
17. **Sen, A.D.**, Roeder, C.W., Lehman, D.E., Berman, J.W. (2018) "Seismic Performance Evaluation of Older and Retrofitted Concentrically Braced Frames using Nonlinear Response-History Analysis." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
18. **Marafi, N.A.,** Eberhard, M.O., Berman, J.W. (2018) "Impacts of Deep Sedimentary Basins on Reinforced Concrete Walls During Subduction Zone Earthquakes." ASCE/SEI Structures Congress, Ft. Worth TX, April 2018.
19. **Marafi, N. A.**, Berman, J. W., Eberhard, M. O., Wirth, E. A., Frankel A. D., and Vidale, J. E. (2017) "Effects of Simulated Magnitude 9 Earthquake Motions on Structures in the Pacific Northwest." 2017 Annual Meeting Seismological Society of America, Denver, Colorado, April 2017
20. **Sen, A.D.**, Roeder, C.W., Berman, J.W., Lehman, D.E. (2017) "Numerical Study on Enhanced Seismic Performance for Vulnerable Concentrically Braced Frame." ASCE/SEI Structures Congress, Denver, CO, April 2017.
21. **Marafi, N. A.**, Eberhard, M. O., and Berman, J. W. (2017) "Effects of the Yufutsu Basin on Structural Response during Subduction Earthquakes ". 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
22. **Marafi, N. A.,** Berman, J.W., and Eberhard, M. O. (2017) "A New Intensity Measure that Accounts for the effects of Spectral Acceleration, Duration, and Spectral Shape". 116th World Conference on Earthquake Engineering, Santiago, Chile, January 2017
23. Sen, A. D., Roeder, C. W., **Berman, J. W.**, Lehman, D. E., Tsai, K. C., Li, C. H., and Wu, A. C. (2017). "Seismic performance of chevron braced frames with yielding beams." Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
24. **Sen, A. D.**, Swatosh, M., Sloat, D., Johnson, M., Ballard, R., Berman, J. W., Lehman, D. E., and Roeder, C. W. (2017). "Seismic vulnerability and rehabilitation of older concentrically braced frames." Proceedings of the 16th World Conference on Earthquake Engineering, Santiago, Chile, January 2017.
25. **Berman, J.W.**, Weigand, J.M. (2016). "Steel Gravity Connections Subjected to Large Rotations and Axial Loads." AISC Steel Connections VIII, Boston, MA, April 2016.
26. **Berman, J.W.,** Frankel, A, Vidale, J., Wirth, E., Eberhard, M., Marafi, N. Motley, M., LeVeque, R., Gonzales, F. (2016). "Overview of the M9 Project", EERI Annual Meeting, San Francisco, CA.
27. **Sen, A. D**., Palmer, K., Pan, L., Roeder, C. W., Lehman, D. E., Berman, J. W. (2015). "Evaluation of chevron concentrically braced frames with weak beams." 2nd ATC-SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA, December 2015.
28. Pei, S., **Berman, J.W.,** Ganey, R, Ricles, J.M., Sause, R., Dolan, J.D., Van deLindt, J.W. (2015) "Prototyping Seismic Resilient CLT Lateral Systems: Results from NEES-CLT Planning Project" Structural Engineers Association of California Convention, Bellevue, WA, September, 2015.

29. **Clayton, P.M.**, Berman, J.W., Lowes, L.N. (2015) "Mitigating Web Plate Damage and Reducing Frame Demands in Resilient Steel Plate Shear Walls" ASCE/SEI Structures Congress, Portland, OR, April 2015.
30. Lopes, A., **Dusicka, P.**, Berman, J.W., (2015) "Lateral Stiffness Approximation of the Linked Column Steel Frame System" ASCE/SEI Structures Congress, Portland, OR, April 2015.
31. **Berman, J.W.**, and Ganey, R., (2015) "Seismic Performance of Stacked Single-Story Rocking CLT Walls in Tall Wood Buildings." ASCE/SEI Structures Congress, Portland, OR, April 2015.
32. **Main, J.,** Weigand, J.W., Johnson, E., Francisco, T., Liu, J., Berman, J.W., Fahnestock, L.A., (2015) "Analysis of a Half-Scale Composite Floor System Test under Column Loss Scenarios." ASCE/SEI Structures Congress, Portland, OR, April 2015.
33. **Sen, A.,** Ballard, R., Sloat, D., Johnson, M., Pan, L., Roeder, C.W., Berman, J.W., Lehman, D., Tsai, K.C., Li, C.H., and Wu, A.C., (2015) "Seismic Performance Evaluation and Rehabilitation of Pre-Capacity Design Concentrically Braced Frames." ASCE/SEI Structures Congress, Portland, OR, April 2015.
34. **Pei, S.,** van de Lindt, J., Dolan, J., Ricles, J., Sause, R., Berman, J.W., Blomgren, H.E., Willford, M., Popovski, M., Rammer, D., (2015) "Seismic Resilient CLT Building for Pacific Northwest: Challenges and Opportunities." ASCE/SEI Structures Congress, Portland, OR, April 2015.
35. **Weigand, J.W.,** and Berman, J.W., (2015) "New Steel Gravity Connection Details for Enhanced Integrity." ASCE/SEI Structures Congress, Portland, OR, April 2015.
36. Sarti, F., **Palermo S.**, and Berman, J., (2014) Evaluation of the Seismic Performance Factors of Port-Tensioned Timber Wall Systems", Second European Conference on Engineering and Seismology, Istanbul, August, 2014.
37. **Pei, Shiling**; Berman, Jeffrey; Dolan, Daniel; van de Lind, J; Ricles, James; Sause, Richard; Blomgren, Hans-Erik; Popovski, Marjan; Rammer, Douglas; (2014) "Progress on the development of seismic resilient Tall CLT Buildings in the Pacific Northwest" Proceedings of the 2014 World Conference on Timber Engineering, Quebec City, Canada
38. **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.
39. **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.
40. 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.
41. 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.
42. 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
43. 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

44. **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
45. **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.
46. **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.
47. 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
48. **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
49. **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.
50. **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.
51. 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.
52. 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.
53. 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.
54. **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.
55. **Berman, J.W.** (2013). "Recent Advances in Steel Plate Shear Walls." North American Steel Construction Conference, St. Louis, MO, April 2013.
56. **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.
57. **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.
58. **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.
59. 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.
60. **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.

61. **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.
62. **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.
63. **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.
64. 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.
65. **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.
66. **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.
67. **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.
68. **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.
69. 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.
70. **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.
71. **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.
72. **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.
73. **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.
74. **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.
75. **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.
76. **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.

77. **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.
78. **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.
79. **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	Beyond
Journal of Structural Engineering (ASCE)	1	2	2	2	3	4	3-4 per year
Engineering Structures	2	2	1	1	2	2	2-3 per year
Computer-Aided Civil and Infrastructure Engineering	-	2					<1 per year
Engineering Journal (AISC)	2	-					<1 per year
Journal of Constructional Steel Research	-	1	1		1	1	2 per year
Structural Engineering and Mechanics		2					<1 per year
Canadian Journal of Civil Engineering			1	1			<1 per year
Structural Dynamics and Earthquake Engineering				2			<1 per year
Earthquake Engineering and Structural Dynamics							1 per year
Journal of Bridge Engineering				2	4	2	2 per year

Proposals Reviewed

Organization	'09	'10	'12	'13	'14	'16
National Science Foundation	-	12	10	12	11	14
OTREC	2	-				

GRADUATE STUDENTS

Chaired Doctoral Degrees

Current Students				
Student Name	**Year Started**	**Dissertation Title (Funding Agency)**	**Completed (Year)**	**Current Standing**
Sarah Wichman (co-chair with Eberhard)	2018	Rocking CLT Walls in Tall Mass Timber Buildings (NSF)	2021 (Expected)	Ph.D. Candidate
Chi-Pu Lin (co-chair with Wiebe)	2017	Development of Curved Base Rocking Walls (Liao Fellowship)	2020 (Expected)	Ph.D. Candidate

Finished Students				
Student Name	**Year Started**	**Dissertation Title (Funding Agency)**	**Completed (Year)**	**Current Standing**
Nasser Marafi (co-chair with Eberhard)	2014	Effects of Cascadia Subduction Earthquakes on Structures (NSF)	2018	RMS
Andrew Sen (co-chair with Roeder and Lehman)	2014	Evaluation and Retrofit of Older Steel Braced Frames (NSF)	2018	Assistant Professor, Marquette University
Patricia Clayton (co-chair with Lowes)	2010	Self-Centering Steel Plate Shear Walls: Subassembly and Full-Scale Testing (NSF)	2013	Assistant Professor, UT Austin
David Webster (co-chair with Lowes)	2010	The Inelastic Seismic Response of Steel Plate Shear Wall Web Plates and Their Interaction With the Vertical Boundary Members (NSF)	2014	Thornton Tomasetti
Bo-Shiuan Wang (co-chair with Roeder)	2008	Assessment of Steel Truss Bridge Gusset Plates (WSDOT/Liao)	2013	COWI
Mohammad Malakoutian	2008	An Unbraced Seismic Load Resisting System for Post-Event Rapid Return to Occupancy (NSF)	2013	Amazon.com, part-time Lecturer (UW)
Jonathan Weigand	2008	Assessing the Robustness of Steel Gravity Frame Connections (AISC)	2014	Researcher at NIST (5/2014)

Chaired Masters Degrees

Current Students				
Student Name	**Level of Supervision**	**Thesis/Paper Title (Funding Agency)**	**Completed (Year)**	**Current Employer**
Zachary Kortum (w/ Eberhard)	Thesis	Regional Assessment of Washington State Bridges for M9 Cascadia Ground Motions	2021 (Expected)	
Will Bergendahl (w/ Roeder and Lehman	Thesis	A1085 Steel HSS Brace Behavior	2021 (Expected)	

Kristinn Gretarsson	Thesis	A1085 Steel HSS Brace Behavior	2021 (Expected)	

Finished Students				
Student Name	**Level of Supervision**	**Thesis/Paper Title (Funding Agency)**	**Completed (Year)**	**Current Employer**
Gloria de Zamacona Cervantes (w/ Eberhard)	Thesis	Impacts of M9 Cascadia Ground Motions on Bridges	2019	HNTB
Kristinn Bjarnason	Thesis	Analysis of Damage to Low-Rise Large-Volume Buildings from Hurricane Michael with Lidar and SfM Point Clouds	2020	
Sarah Wichman	Thesis	Dynamic Testing of Rocking CLT Walls (NSF)	2018	Ph.D. Candidate
Sara Ibarra (w/ Roeder and Lehman)	Thesis	Evaluation of Chevron Braced Frames with Yielding Beams (AISC)	2018	KPFF
Clare Terpstra (w/ Roeder and Lehman)	Thesis	Chevron Braced Frames with a Beam Yielding Mechanism (AISC)	2017	Degenkolb
Marsh Swatosh (w/ Roeder and Lehman)	Thesis	Experimental Evaluation and Retrofit of Braced Frame Connections (NSF)	2016	Coughlin, Porter, Lundeen
Ryan Ganey	Thesis	Resilient Seismic Load Resisting Concepts for Tall Wood Buildings	2015	Coughlin, Porter, Lundeen
Ryan Ballard (w/ Roeder and Lehman)	Thesis	Experimental Evaluation and Retrofit of Braced Frame Connections (NSF)	2015	KPFF
Molly Johnson (w/ Roeder and Lehman)	Thesis	Experimental Evaluation of Bolted Braced Frame Connections (NSF)	2014	LeMessurier
Daniel Sloat (w/ Roeder and Lehman)	Thesis	Experimental Evaluation of Deficient Braced Frame Connections (NSF/Valle)	2014	Degenkolb
Andrew Sen (w/ Roeder and Lehman)	Thesis	Evaluation of Weak-Beam Chevron Braced Frames (NSF)	2014	PhD Candidate
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 Hauksdottir	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
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**	**Role**	**Completed** (Year)
Ph.D. Committees			
Tianye (Andrew) Yang	Dissertation	Committee Member (Chairs-Clavi and Wiebe)	2020 (expected)
Cindy Chen	Dissertation	GSR (Chair – Ganguly UW Forestry)	2019 (expected)
Sam Sedaris	Dissertation	Committee Member (Chair - Kramer)	2019
Michael Greenfield	Dissertation	Committee Member (Chair - Kramer)	2018
Jacob Dafni	Dissertation	Committee Member (Chair – Wartman)	2017
Max Stephens	Dissertation	Committee Member (Chairs - Roeder, Lehman)	2016
Dmitry Volynkin	Dissertation	Outside Reader, University of Aukland Student (Chair-Charles Clifton)	2016
Adam Phillips	Dissertation	Committee Member, Virginia Tech Student (Chair-Eatherton)	2016
Daniel Borello	Dissertation	Committee Member, UIUC Student (Chair – Fahnestock)	2014
Keith Palmer	Dissertation	Committee Member (Chairs - Roeder, Lehman)	2012
Po-Chien Hsaio	Dissertation	Committee Member (Chair - Roeder)	2012
M.S. Committees			
Otgonchimeg (Audrey) Davaadorj	Thesis	Committee Member (Chair - Calvi)	2018
Abigail Christman	Thesis	Committee Member (Chair - Calvi)	2017
SandipTimsina	Thesis	Committee Member (Chair - Calvi)	2017
Leikune Aragaw	Thesis	Committee Member (Chair - Calvi)	2017
Ashley Heid	Thesis	Committee Member (Chairs - Roeder, Lehman)	2016
Todd Maki	Thesis	Committee Member (Chairs - Roeder, Lehman)	2015
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-Helnwien)	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			
Dominic Grasso	NSF REU-RAPID	Lidar points clouds of hurricane damaged coastal structures	2019
Harriet Wright	NSF REU-RAPID	SfM from Streetview images	
Emily Mongold	NSF REU-RAPID	Merging SFM and lidar point clouds	2019
Ian McWhiter	Lab Research	Chevron Frames with Yielding Beams (AISC)	2017
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 Research	Re-Centering Steel Plate Shear Walls-Phase II	2011
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**
PacTrans	Data-Driven Assessment of Post-Earthquake Bridge Functionality and Regional Mobility	$180k		$45k	Co-PI, PI Motter, co-PI's Eberhard, Phillips, Maurer	
NSF	CoPe EAGER: Coastal Hazards Planning in Time	$297k		$59k	co-PI, PI Abramson, co-PI's Bostrom, Tobin,	2019-2021
WSDOT	Effects of Cascadia Subduction Zone M9 Earthquakes on Bridges in Washington State	$180k		$45k	co-PI, PI Eberhard, Co-PI's Kramer, Maurer	2019-2021

USGS	Implications of Simulated Motions for M9 Cascadia Subduction Zone Earthquake: Collaborative Research with University of Washington and USGS	$73k		$20k	co-PI, PI Eberhard, co-PI Maurer	2019-2020
NSF	RAPID/Collaborative Research: Performance of Low-Rise Large-Volume Buildings in Florida during 2018 Hurricane Michael	$27k		$27k	PI	2018-2019
NSF	Social Science Extreme Events Reconnaissance (SSEER) and Interdisciplinary Science and Engineering Extreme Events Reconnaissance (ISEEER) Facility	Subaward from CU Boulder $200k		$50k	UW co-PI, UW PI Wartman, Project PI Peek at CU	2018-2023
NSF	NHERI RAPID Facility 2016-2020	$4100k + $1600k Supplment in 2018		$1.8M	Co-PI, PI Wartman, Co-PI Miles, Olsen (OSU), Irish (VTech)	2016-2020
NSF	Collaborative Research: Development and Validation of A Resilience-based Seismic Design Methodology for Tall Wood Buildings	$195k		$195k	PI	2016-2020
NSF	MRI: Acquisition of a 3D X-Ray Computed Tomography Scanner for Imaging of Large Size Infrastructure, Biological, and Mechanical Components	$1,534k	$511k	$800k	PI, co-PI's Khbeis, Yang, Kramer, Storti (UW)	7/14-6/17
NSF	NEESR Planning: Engineered Timber Structural Systems for Seismically Resilient Tall Buildings	$440k		$70k	Co-PI, PI Pei (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		$300k	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)		$226k	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
WSDOT	Determining the Cost/Benefit of Routine Maintenance Cleaning of Steel Bridges to Prevent Structural Deterioration	$75k		$40k	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 Purishinge (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		**$15,538k**		**$5,002k**		

Pending Proposals

Funding Agency	Title	Total Amount (Subcontracts)	UW Matching	Berman Amount	Role, Other Pi's, co-Pi's	Dates

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
CESG 527	Earthquake Engineering II	Fall, 2020	3	18	Yes, 8/22	3.8	4.5	4.5	4.2
CEE 456	Structural Analysis	Spring, 2020	5	88	Yes, 38/88	4.6	4.9	4.7	4.7
CESG 527	Earthquake Engineering II	Fall, 2019	3	18	Yes, 5/18	4.3	4.5	4.3	4.3
CESG 524	Advanced Steel	Winter 2019	3	30					
CESG 527	Earthquake Engineering II	Fall, 2018	3	20	Yes, 9/20	4.4	4.6	4.4	4.4

CEE 377	Intro. to Struct, Eng.	Winter, 2018	5	74	Yes 59/74	3.9	3.9	3.9	3.9
CEE 516	Earthquake Engineering II	Fall, 2017	3	21	Yes 9/21	4.2	4.4	4.9	4.6
CEE 377	Intro. to Struct, Eng.	Winter, 2017	5	69	Yes 61/69	3.6	4.0	4.1	3.8
CEE 516	Earthquake Engineering II	Fall, 2016	3	21	Yes 16/21	4.2	4.4	4.0	4.2
CEE 599	Advanced Steel II	Summer, 2016	3	9	Yes 6/9	4.7	4.8	4.7	4.8
CEE 220	Mechanics of Materials	Winter, 2016	4	152	Yes 100/152	4.5	5.0	4.6	4.6
CEE 516	Earthquake Engineering II	Fall, 2015	3	12	Yes 12/12	4.8	5.0	4.8	4.9
CEE 502	Structural Dynamics	Winter, 2015	3	43	Yes 38/43	3.9	4.3	4.1	4.1
CEE 516	Earthquake Engineering II	Fall, 2014	3	20	Yes 15/20	4.5	4.9	4.7	4.7
CEE 220	Mechanics of Materials	Spring, 2014	4	248	Yes	4.2	4.2	4.1	4.2
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, 2007	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 499	Steel Design (Gun Woo Park)	Winter, 2017	1 (3)
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

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.

SERVICE

Departmental service

Committee/Activity	Role/Contribution	Dates
CEE Undergraduate Education Committee	Member	Fall 2020- present
Search Committee, Structural Engineering Faculty	Member	Fall 2019-Spring 2020
Search Committee, CEE Administrator	Member	Spring 2018
CEE Faculty Affairs Committee	Member	Fall 2017-Spring 2020
Search Committee, CEE Department Chair	Member	Winter-Spring 2017
Search Committee, Geomatics Engineering	Co-Chair	Fall 2016-Spring 2017
X-Ray CT Scanner Lab	Director	Fall 2017-present
Mentor Committee for CEE Faculty Amy Kim	Member	Fall 2014-present
Mentor Committee for CEE Faculty Mari Winkler	Member	Fall 2015-present
CEE Graduate Education Committee	Member	Fall 2016-Spring 2017
CEE Graduate Education Committee	Chair	Fall 2015-Summer

		2016
Structural Research Laboratory Director: Oversee staff, scheduling and $30k to $70k of commercial testing per year.	Director	Summer 2012-Winter 2019
More Hall Basement Committee: Plans for remodel, reuse, and maximizing space in the More Hall basement	Member	Fall 2015-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 2011-Spring 2012
Search Committee, Structural Engineering Faculty Position	Member	Fall 2010-Spring 2011
Curriculum Committee	Member	Fall 2010-Winter 2011
CEE Undergraduate Education Committee	Member	Fall 2013-Summer 2016
Undergraduate Admissions Committee	Member	Summer 2010-Summer 2013
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

Committee/Activity	**Role/Contribution**	**Dates**
Interdisciplinary Engineering Building (IEB) Planning Committee	Member	Summer 2020-present
College of Engineering COVID Retrun to Work Task Force	member	Spring 2020-present
College of Engineering Lecture Series: Engineering Solutions for a Seismically Resilient Seattle, University of Washington	Presenter	October, 2016
Structural and Earthquake Engineering at UW: CEE 100	Presenter	Spring 2014, Spring 2015, Winter 2018
Structural and Earthquake Engineering at UW: NASA Summer Undergraduate Researchers	Presenter	Summer, 2014
Structural and Earthquake Engineering at UW: ENGR 202	Presenter	Spring, 2013
Hosting AISC Student Steel Bridge	Lead Faculty	September 2012

Competition at UW: 300+ students from across U.S. at UW for the National Competition		
Structural and Earthquake Engineering as a Humanitarian Pursuit: Gen Studies 197f	Presenter	December, 2009

University service

Committee/Activity	Role/Contribution	Dates
RRF Reviewer	Reviewer	Fall 2020
Grant Writing Workshop for PhD Students	Presenter	September 2012

Professional society and other service

Committee/Activity	Role/Contribution	Dates
10 papers cited ANSI/AISC 341-16: Seismic Provisions for Structural Steel Buildings	Reference Building Code Document	Standard date: 2016 (papers span 10 years)
Central Scheduling Committee, NHERI	Member	May, 2017- present
2018 National Conference on Earthquake Engineering: Special Session: Impacts of a Magnitude-9 Earthquake on the Pacific Northwest (The M9 Project): Part 1	Organizer, session accepted	June, 2018
2018 National Conference on Earthquake Engineering: Special Session: Impacts of a Magnitude-9 Earthquake on the Pacific Northwest (The M9 Project): Part 2	Organizer, session accepted	June, 2018
Building Seismic Safety Council, Issue Team 4 (IT4), Looking at Changes for Shear Wall Design in the Uniform Building Code	Member	2016-present
2016 EERI Annual Meeting-Local Organizing Committee	Member LOC	2015-2016
Session at 2015 ASCE Structures Congress: Evaluation and Retrofit of Low-Ductility Steel Braced Frames	Proposer, Organizer and Chair	April, 2015
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

None.

International, national or governmental service

Committee/Activity	Role/Contribution	Dates
Washington State Seismic Safety Committee	Member	Fall 2018-present
Washington State School Seismic Safety Steering Committee, Department of Natural Resources	Committee member, overseeing seismic evaluation of 220 school buildings in Washington State	Winter 2018-present

All other service

None.