

DAWN ELLEN LEHMAN

Curriculum Vitae

Civil and Environmental Engineering
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EDUCATIONAL HISTORY

University of California, Berkeley, CA
Ph.D., Civil and Environmental Engineering
December 1998
Dissertation: Performance-Based Seismic Design of Well-Confined Concrete Columns

University of California, Berkeley, CA
M. Eng., Civil and Environmental Engineering
December 1992
Thesis: Second-Order Effects in Steel Moment Frames

Tufts University, Medford, MA
B.S., Civil Engineering
May 1989

EMPLOYMENT HISTORY

University of Washington
Civil and Environmental Engineering
Professor, 2014 - present

University of Washington
Civil and Environmental Engineering
Associate Professor, 2009-2014

University of Washington
Civil and Environmental Engineering
Assistant Professor, 2002 - 2009

University of Washington
Civil and Environmental Engineering
Acting Assistant Professor, 1998-2002

University of California
Berkeley, CA USA
Graduate Student Researcher, 1992-1998

Alameda College
Alameda, CA USA
Lecturer, 1995

University of California

Berkeley, CA USA
Graduate Student Instructor, 1992-1994

United Engineers and Constructors
Boston MA USA
Structural Engineer, 1989-1990

AWARDS AND HONORS

Chaired Positions

John R. Kiely Professor in Civil and Environmental Engineering, 2006 -2010, UW

Awards

Chair's Service Award, UW CEE, 2018
Transitional Support Program Award, ADVANCE, 2017, UW
2008 Munro Prize, The Engineering Structures Award for the Best Paper of the Year
Outstanding Earthquake Spectra Paper, 2007, Earthquake Engineering Research Institute
Transitional Support Program Award, ADVANCE, 2004, UW
Outstanding Graduate Student Instructor, 1993, UC Berkeley

Nominations

Faculty Innovator: Research, 2010, College of Engineering, UW
Distinguished Teaching Award, 2006, UW
Outstanding Educator Award in the College of Engineering, 2004, UW

AFFILIATIONS AND OTHER APPOINTMENTS

(All appointments at University of Washington)

Computer Science and Engineering
Special Advisor on Construction, 2016-2018

Clean Energy Institute
Special Advisor on Infrastructure, 2015-2016

Office of Planning and Budgeting
Special Advisor to the Vice Provost on Space Use and Planning, 2013-2015

College of Engineering
Associate Dean for Infrastructure, 2012-2015

PUBLICATIONS

Refereed Archival Journal Publications

1. Zhao M, Lehman D and Roeder C. (2021) "Modeling Recommendations for RC and CFST Sections in LS-Dyna including Bond Slip" Engineering Structures, February 2021.

2. Zhao M., Wang Y., Lehman D., Geng Y. and Roeder C. (2021) “Response and Modeling of Axially-Loaded Concrete-Filled Steel Columns with Recycled Coarse and Fine Aggregate” *Engineering Structures*, May 2021.
3. Behrouzi A., Mock A., Lehman, D., Lowes L. and Kuchma D. (2020) “Impact of Bi-Directional Loading on the Seismic Performance of C-Shaped Piers of Core Walls”, *Engineering Structures*, January 2020.
4. H Asada, AD Sen, T Li, JW Berman, DE Lehman (2020) [Seismic performance of chevron-configured special concentrically braced frames with yielding beams](#), *Earthquake Engineering & Structural Dynamics*, 2020.
5. Zhang, H., Calvi, P., Lehman, D., Kuder, K. and Roeder, C. (2020) “Response of Recycled Coarse Aggregate Concrete Subjected to Pure Shear”, *ASCE Journal of Structural Engineering*, 146 (5), 04020075.
6. Guo, Z. Jiang, T., Zhang, J., Kong, X. Chen, C. and Lehman, D. (2020) Mechanical and durability properties of sustainable self-compacting concrete with recycled concrete aggregate and fly ash, slag, silica fume. *Construction & Building Materials*. Volume 231, 20 January 2020, 117115.
7. Lowes, L., Lehman, D and Baker, C. (2020) SP-339-11: Recommendations for Modeling the Nonlinear Response of Flexural Reinforced Concrete Walls Using Perform. ACI Special Publication, 2020.
8. Zhang H, Wang Y, Lehman D, Geng Y, (2020) Autogenous-shrinkage model for concrete with coarse and fine recycled aggregate - Cement and Concrete Composites, 2020, Volume 111, August 2020, 103600.
9. Wang H, Wang W, Bao Y, Lehman D (2020) Numerical investigation on progressive collapse resistance of steel-concrete composite floor systems. *Structure and Infrastructure Engineering*, 2020.
10. Zhanggen G., Chen C, Lehman D., Xiao W, Zheng S. and Fan B. (2020) Mechanical and durability behaviour of concrete made with recycled coarse and fine aggregates. Pages 171-189 | Published online: 05 Sep 2020.
11. Roeder C., Sen D., Asada H., Ibarra S., Lehman D., Berman J., Tsai, K., Tsai, C., Wu A., Wang K., and Liu R. (2019) Seismic Performance and Design of Multistory Chevron Braced Frames with Yielding Beams, *Journal of Constructional Steel Research*, *Journal of Constructional Steel Research*, October 2019.
12. Roeder, C., Sen, A., Tempstra, C., Ibarra, S. Liu, R., Lehman, D. and Berman, J. (2019) “Effect of beam yielding on chevron braced frames.” *Journal of Constructional Steel Research* 159:428-441. July 2019. DOI: 10.1016/j.jcsr.2019.04.04
13. Sen, A., Berman, J., Roeder C. and Lehman, D. (2019) “Nonlinear Modeling of Concentrically Braced Frames, *Journal of Constructional Steel Research*, 2019. <https://doi.org/10.1016/j.jcsr.2019.02.007>
14. Lowes, L., Lehman, D. and Whitman, Z. (2019) Investigation of failure mechanisms and development of design recommendations for flexural reinforced concrete walls. May 2019. *Engineering Structures* 186:323-335 DOI: 10.1016/j.engstruct.2019.01.122
15. Li T., Sen A., Roeder C., Lehman D., Berman, J., Eberhard, M., and Marafi, N. (2019) “Seismic Performance of Special Concentrically Braced Frames in Deep Basins during Subduction-Zone

- Earthquakes”, *Engineering Structures*, March 2019, *Engineering Structures* 188(1):87-103, DOI: 10.1016/j.engstruct.2019.02.057
16. Wang, J., Wang, W., Lehman, D. and Roeder, C. (2019) “Effects of different steel-concrete composite slabs on rigid steel beam-column connection under a column removal scenario”, *Journal of Constructional Steel Research* 153:55-70, DOI: 10.1016/j.jcsr.2018.09.025
 17. Marafi, N., Kamal, K., Lehman, D. and Lowes, L. (2019) “Variability in Seismic Collapse Probabilities of Solid and Coupled-Wall Buildings”, *Journal of Structural Engineering*, April 2019
 18. Wang, J., Wang, W., Lehman, D. and Roeder, C. (2019) “Effects of different steel-concrete composite slabs on rigid steel beam-column connection under a column removal scenario”, *Journal of Constructional Steel Research*, 153, 55-70, 2019, <https://doi.org/10.1016/j.jcsr.2018.09.025>
 19. Lehman, D., Roeder, C., Heid, A. and Yoo, J.H. (2018) “Shear Response of Concrete Filled Tubes Part II: Analytical Study”, *Journal of Constructional Steel Research*, 153, 169-178, 2018
 20. Lehman, D., Roeder, C., Heid, A., Maki T., and Khaleghi, B. (2018) “Shear Response of Concrete Filled Tubes Part I: Experiments”, *Journal of Constructional Steel Research*, 150, 528-540, 2018
 21. Guo Z., Tu, A., Chen, C., Lehman, D. (2018) “Mechanical properties, durability, and life-cycle assessment of concrete building blocks incorporating recycled concrete aggregates” *Journal of Cleaner Production* 199, 136-149, 2018
 22. Welt, T. Lehman, D., Lowes, L. and Lafave, J. “A Constitutive Model Incorporating Compressive Energy for Rectangular RC Sections Across a Range of Confinement Conditions”, *Engineering Structures*, 193, 344-362, 2018
 23. Roeder, C., Stephens, M. and Lehman, D. (2018) “Concrete Filled Steel Tubes for Bridge Pier and Foundation Construction”, *International Journal of Steel Structures* 18(1): 1-11 (2018), DOI 10.1007/s13296 March 2018, Volume 18, Issue 1, pp 39–49|
 24. Shegay, A., Motter, C. Lehman, D., Lowes, L., Elwood, K. and Henry, R. (2018) “Impact of Axial Load Ratio on the Seismic Response of Rectangular Walls”, *Journal of Structural Engineering*, *Journal of Structural Engineering* 144 (8), 04018124
 25. Stephens, M., Lehman, D. and Roeder C. (2018) “Seismic Performance Modeling of Concrete-Filled Steel Tube Bridges: Tools and Case Study”, *Engineering Structures*, 165, 88-105
 26. Welt T., Lehman D. and LaFave J. (2018) “Boundary Element Detailing in Special Concrete Structural Walls” *ACI Structural Journal* 115 (3), 635-647
 27. Lowes, L. Pugh, J. and Lehman D. (2017) “Accurate Methods for Elastic Seismic Demand Assessment of Reinforced Concrete Walls”, *ASCE Journal of Structural Engineering*, *Journal of Structural Engineering*, Vol. 143, Issue 8 (August 2017) [https://doi.org/10.1061/\(ASCE\)ST.1943-541X.0001669](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001669)
 28. Z Guo, C Chen, B Fan, DE Lehman, W Sun (2017) “Experimental study on frame structures with recycled aggregate concrete under lateral cyclic loads” *Structural Concrete* 19 (2), 411-421.

29. Sen A., Roeder C., Lehman D. and Berman, J. (2017) “Development and Evaluation of Seismic Retrofit Alternatives for Older Concentrically Braced Frames”, *Journal of Structural Engineering* 142 (12), 04016123.
30. Welt, T., Massone, L., LaFave, J., and Lehman, D. (2017) “Confinement Behavior of Rectangular Reinforced Concrete Prisms Simulating Wall Boundary Elements”, *ASCE Journal of Structural Engineering*, April 2016
31. Chen, J., Kuder, K., Lehman D., Roeder C., and Lowes L. (2017) “Creep Modeling of Concretes with High Volumes of Supplementary Cementitious Materials and its Application to Concrete-Filled Tubes”, *Materials and Structures*, 50(1) February 2017.
32. Z Guo, Z Xu, C Chen, B Zhang, DE Lehman, S Cao. (2017) “Behavior of GFRP retrofitted reinforced concrete slabs subjected to conventional explosive blast” *Materials and Structures* 50 (6), 236
33. H Zhu, MT Stephens, CW Roeder, DE Lehman (2017) “Inelastic response prediction of CFST columns and connections subjected to lateral loading” *Journal of Constructional Steel Research* 132, 130-140
34. E Jung, SH Lee, JH Yoo, C Roeder, D Lehman (2017) “Shear behavior of large-diameter concrete filled tube (CFT)” *International Journal of Steel Structures* 17 (4), 1651-1665
35. Stephens, M., Lehman, D. and Roeder, C. (2016) “Design of CFST Column-to-Cap Beam Connections for Moderate and High Seismic Regions” *Engineering Structures* 122:323-337 September 2016 DOI: 10.1016/j.engstruct.2016.05.023
36. Moon, J., Lehman, D., Roeder, C., Lee, H and Lee, T. (2016) “Analytical Evaluation of Reinforced Concrete Pier and Cast-in-Place Steel Shell Pile Connection Behavior considering Steel-Concrete Interface” *Journal Advances in Materials Science and Engineering*, Volume 2016, Article ID 4159619, 14 pages.
37. Sen, A.D., Sloat, D., Ballard, R., Johnson, M.M., Roeder, C.W., Lehman, D.E., and Berman, J.W. (2016). "Experimental evaluation of the seismic vulnerability of braces and connections in older concentrically braced frames." *ASCE Journal of Structural Engineering*. 10.1061/(ASCE) ST.1943-541X.0001507, 04016052.
38. Stephen, M., Berg, L., Lehman, D., and Roeder, C. (2016) “Seismic CFST Column-to-Precast Cap Beam Connections for Accelerated Bridge Construction” *ASCE Journal of Structural Engineering, J. Struct. Eng.*, 10.1061/(ASCE)ST.1943-541X.0001505.
39. Sen, A.D., Roeder, C.W., Berman, J.W., Lehman, D.E., Li, C.H., Wu, A.C., and Tsai, K.C. (2016). "Experimental investigation of chevron concentrically braced frames with yielding beams." *Journal of Structural Engineering*, 10.1061/(ASCE)ST.1943-541X.0001597.
40. Palmer, K., Roeder, C. and Lehman, D. (2016) “Connection Design Recommendations for Improved BRBF Performance”, *AISC Engineering Journal*, January 2016, Issue 53, Pages 29-45.
41. Lowes, L. Pugh, J. and Lehman D. (2015) “Line-Element Modeling of Flexural Reinforced Concrete Walls”, *Engineering Structures*, Vol. 104, December 2015, Pages 174–192 10.1016/j.engstruct.2015.08.037
42. Birley, A., Lowes, L. and Lehman, D. (2014) “Evaluation of ASCE 41 Modeling Parameters for Slender Reinforced Concrete Structural Walls” *ACI Special Publication 297*, Issue: 1-18
43. Stephens, M.¹, Lehman D.E., and Roeder, C.² “(2014) Concrete Filled Tubes for Accelerated Bridge Construction” *Journal of the Transportation Research Board*, DOI: 10.3141/2406-06, 2014.

44. Lehman, D.E., Kuder, K.², Gunnarsson, A.K.¹, Roeder, C.W.², and Berman, J.W.² (2014) "Circular Concrete Filled Tubes for Improved Sustainability and Seismically Resilience" *J. Struct. Eng.* 141, SPECIAL ISSUE: Sustainable Building Structures, B4014008.
45. Lehman, D. and Roeder, C.² (2013) "A New Connection for Seismic Performance Enhancement of Marginal Wharves" ACI Special Publication, Recent Advances in the Design of Prestressed Concrete Piles in Marine Structure in Seismic Regions, September 2013.
46. Moon, J.¹, Lehman, D.E., Roeder, C.W.², and Lee, H-E² (2013) "Evaluation of Embedded Concrete Filled Tube (CFT) Column-to-Foundation Connections," *Engineering Structures*, Elsevier, <http://dx.doi.org/10.1016/j.engstruct.2013.04.011>.
47. Lehman, D., Lowes, L.², Turgeon, J.¹, Birely A.¹, Kuchma D.², Marley, K. and Hart C. (2013) "Seismic Behavior of Modern Coupled Walls", *ASCE Journal of Structural Engineering*, 139, SPECIAL ISSUE: NEES 2: Advances in Earthquake Engineering, 1371–1381, July 2013.
48. Chiamonte, M.¹ Arduino, P.², Lehman, D., and Roeder C.², (2013) "Seismic Analyses of Conventional and Improved Marginal Wharves." *Earthquake Engineering and Structural Dynamics*, Article first published online: Jan 10 2013 DOI: 10.1002/eqe.2280.
49. Lehman, D., Roeder, C.W.², Stringer, S.J.¹, and Jellin, A.¹ (2013) "Seismic Performance of Improved Pile-to-Wharf Deck Connections," *PCI Journal*, Precast/Prestressed Concrete Institute, Summer 2013.
50. Moon J.¹, Lehman D., Ko H., and Lee H. (2013). "Analytical Simulation of Axial Behavior of RCFT Wall". *Applied Mechanics and Materials*, Vol. 284-287, pp. 1220-1224. doi:10.4028/www.scientific.net/AMM.284-287.1220.
51. Hsiao, P.¹ Lehman, D. and Roeder, C.² (2013) "Evaluation of the Response Modification Coefficient and Collapse Potential of SCBFs", *Earthquake Engineering and Structural Dynamics*, to appear in print. Published online: 14 Feb 2013, DOI: 10.1002/eqe.2286.
52. Palmer, K.¹, Roeder, C.², Lehman, D., Okazaki, T.², and Shield, C.² (2013) "Experimental Performance of Steel Braced Frames Subjected to Bi-Directional Loading", *Journal of Structural Engineering* 139, SPECIAL ISSUE: NEES 2: Advances in Earthquake Engineering, 1274–1284. doi: 10.1061/41171(401)266.
53. Palmer, K.¹ Roeder, C.², Lehman, D., Okazaki, T.² and Shield, C.² (2012) "Concentric X-Braced Frames with HSS Bracing", *International Journal of Steel Structures (IJoSS)*, International Journal of Steel Structures, September 2012, Volume 12, Issue 3, pp 443-459.
54. Moon, J.¹, Lehman, D. E.², and Roeder, C. W.² (2012). "Strength of Circular Concrete-filled Tubes (CFT) with and without Internal Reinforcement under Combined Loading." *ASCE Journal of Structural Engineering*, Permalink: [http://dx.doi.org/10.1061/\(ASCE\)ST.1943-541X.0000788](http://dx.doi.org/10.1061/(ASCE)ST.1943-541X.0000788).
55. Lehman, D.E. and Roeder, C.W.² (2012) "Foundation Connection for Circular Concrete Filled Tubes," *Journal of Constructional Steel Research*, Vol. 78, November 2012, pgs. 212-25, Elsevier.
56. Lumpkin, E.J.¹, Hsiao, P-C¹, Roeder, C.W.², Lehman, D.E., Tsai, C-Y, Wu, A-C, Wei, C-Y, and Tsai, K-C, (2012) "Investigation of the Seismic Response of Multi-Story Braced Frames," *Journal of Constructional Steel Research*, Vol. 77, Oct 2012, pgs 131-144.
57. Birely¹, A.C., Lowes, L.N., Lehman, D.E. (2012) "Linear Analysis of Concrete Frames Considering Joint Flexibility" *ACI Structural Journal* 109(3) (2012): 381-391, May 2012.

58. Hsiao, P-C¹, Lehman, D.E., and Roeder, C.W.² (2012) "Improved Analysis Model for Special Concentrically Braced Frames," *Journal of Constructional Steel Research*, ,v 73, p 80-94, June 2012; ISSN: 0143974X; DOI: 10.1016/j.jcsr.2012.01.010.
59. Lowes, L.², Lehman, D., Birley A.¹, Kuchma D.², Marley, K¹. and Hart C.¹ (2012) "Seismic Behavior of Slender Planar Walls with Well-Confined Boundary Elements," *Engineering Structures*, Volume 43, October 2012, p. 31-47. ISSN: 0141-0296 DOI: 10.1016/j.engstruct.2012.04.040.
60. Hsiao, P-C¹, Lehman, D.E., Berman, J.W.², Roeder, C.W.², and Powell, J.¹ (2012) "Seismic Vulnerability of Older Braced Frames," *Journal of Performance of Constructed Facilities*, ASCE, Reston, VA, DOI 10.1061(ASCE)CF.1943-5509.0000394.
61. Hsiao, P.¹, Roeder, C.² and Lehman D. (2012) "A Model to Simulate Special Concentrically Braced Frames beyond Brace Fracture.", *Earthquake Engineering and Structural Dynamics*, Article first published online: 11 May 2012 DOI: 10.1002/eqe.2202.
62. Moon, J.H.¹, Roeder, C.², Lehman D. and Lee, H.² (2012) "Analytical Modeling of Bending of Circular Concrete-filled Tubes", *Engineering Structures*, Vol. 42, September, 2012. p. 349-36.
63. Hsiao, P.¹, Lehman, D. and Roeder C.² (2012) "Improved Analytical Model for Special Concentrically Steel Braced Frames", *Journal of Constructional Steel Research* Volume 73, June 2012, Pages 80–94.
64. Kuder, K.², Lehman, D., Berman, J.², Hannesson G.¹ and Shogren, R. (2012) "Mechanical Properties of Self Consolidating Concrete Blended with High Volumes of Fly Ash and Slag" *Construction & Building Materials*, Volume 34, September 2012, Pages 285-295.
65. Hannesson, G.¹, Kuder, K.², Shogren R. and Lehman, D. (2012) "The Influence of High Volume of Fly Ash and Slag on the Compressive Strength of Self-Consolidating Concrete" *Construction & Building Materials*, May 2012, Pages 161-168.
66. Lumpkin, E.¹, Roeder, C.² and Lehman, D., (2012) "Seismic Performance Assessment of Concentrically Braced Frames", *Earthquake Spectra*, May 2012, Vol. 28, No. 2, pp. 709-727.
67. Birely, A¹, Lowes, L.², and Lehman D. (2012) "A Model for the Practical Nonlinear Analysis of Concrete Moment Frame Systems including Joint Flexibility", *Engineering Structures*, [Volume 34](#), January 2012, pages 455–465.
68. Berman, J.W.¹, Wang, B-S.¹, Olson, A.W.¹, Roeder, C.W.², and Lehman, D.E. (2012) "Rapid Assessment of Gusset Plate Safety in Steel Truss Bridges," ASCE, *Journal of Bridge Engineering*, Vol 17, No. 2, Reston, VA pgs 221-31.
69. Lumpkin, E.J.¹, Hsiao, P.C.¹, Roeder, C.W.², Lehman, D.E.; Tsai, C.Y.; Wu, A.C.; Wei, C.Y.; Tsai, K.C.² (2012) "Investigation of the Seismic Response of Three-Story Special Concentrically Braced Frames" *Journal of Constructional Steel Research* vol. 77 October, 2012. p. 131-144.
70. Lumpkin, E.¹, Roeder, C.² and Lehman, D. (2011) "A Balanced Design Method for Special Concentrically Braced Frame Connections", *Journal of Constructional Steel Research*, Volume 67, Issue 11, November 2011, pages 1760-1772 .
71. Roeder C.², Lehman D., Clark K.¹, Powell, J.¹, Yoo, JH¹, Tsai KC², Lin CH and Weic CY, (2011) "Influence of Gusset Plates Connection and Braces on the Seismic Performance of X-Braced Frames" *Earthquake Engineering and Structural Dynamics*, Volume 40, Issue 4, pages 355–374, 10 April 2011.

72. Roeder, C.², Lehman, D. and Bishop, E.¹ “Strength and Stiffness of Circular Concrete Filled Tubes”, *ASCE Journal of Structural Engineering*, Vol. 136, No. 12, December 2010, pp. 1545-1553, (doi 10.1061/(ASCE)ST.1943-541X.0000263).
73. Alire, D.¹, Lehman, D., and Stanton, J.². (2011) “Seismic Evaluation of Older Reinforced Concrete Beam-Column Joints”, *ASCE Journal of Structural Engineering*, 10.1061/(ASCE)ST.1943-541X.0000463, Jun. 2011.
74. Roeder, C.², Lehman, D. and Thody, R.¹ “Composite Action in CFT Components and Connections”, *AISC, Engineering Journal*, Vol. 46, No. 4, Chicago, IL, pgs 229-42.
75. Yoo, J. H.¹, Roeder, C.² and Lehman, D. (2009) “Simulated Behavior of Multi-Story X-Braced Systems”, *Engineering Structures* 31 182-197. [24 cites]
76. Lehman, D., Roeder, C.², Johnston, S.¹, Herman D.¹, and Kotulka, B.¹ (2008) “Improved Seismic Performance of Gusset Plate Connections”, *ASCE Journal of Structural Engineering*, Vol. 134, No. 6, pp. 181-189. [43 cites]
77. Lowes, L.N.², Oyen, P.¹, and Lehman, D.E. (2009) “Evaluation and Calibration of Load-Deformation Models for Concrete Walls” *ACI-SP 265: Thomas T.C. Hsu Symposium: Shear and Torsion in Concrete Structures*. Ed. A. Belarbi, Y.L. Mo, A. Ayoub. Farmington Hills: American Concrete Institute: 171-198.
78. Yoo, J. H.¹, Roeder, C.², and Lehman D. (2008) “Analytical Performance Simulation of Special Concentrically Braced Frames”, *ASCE Journal of Structural Engineering*, Vol. 134, No. 6, pp. 190-198. [19 cites]
79. Berry M.¹, Lehman D., and Lowes L.², (2008) “Lumped Plasticity Models for Seismic Performance Simulation of Bridge Columns”, *ACI Structural Journal*, Vol 103, No. 5, pp 270-279. [18 cites]
80. Yoo, J.H.¹, Lehman, D.E., and Roeder, C.W.², (2008) "Influence of Connection Design Parameters on the Seismic Performance of Braced Frames," *Journal of Constructional Steel Research*, Elsevier, Vol. 64, pgs 607-623. [21 cites]
81. Yoo, J.H., Roeder, C.W.², and Lehman, D.E., (2008) "FEM Simulation and Failure Analysis of Special Concentrically Braced Frame Tests," *ASCE Journal of Structural Engineering*, Vol.134, No. 6, Reston, VA, pgs 881-89.
82. Anderson, M.¹, Lehman, D., and Stanton, J.² (2008) “A Cyclic Shear Stress-Strain Model for Joints without Transverse Reinforcement”, *Engineering Structures*, Volume 30, Issue 4, pp. 941-954.
83. Elwood, K.², Matamoros, A.², Wallace J.², Lehman, D., Heintz, J.², Mitchell, A.², Moore, M.², Valley, M.², Lowes, L.², Comartin, C.² and Moehle, J.² (2007) “Update to ASCE/SEI 41 Concrete Provisions.” *Earthquake Spectra*, 23(3), pp. 493-523. [54 cites]
84. Kingsley, A.¹, Williams, T.¹, Lehman, D. and Roeder, C.² (2005) “Experimental Investigation of Column Base Connections for High-Strength Vanadium Steel Concrete Filled Tube Construction”, *International Journal of Steel Structures*, V. 5, No. 4. November 2005, pp. 377-387.
85. Moehle, J.² and Lehman, D. (2006) “Seismic Response of Columns”, *ACI Special Publication*, Vol. 238, October 2006, pp. 23-42.
86. Roeder, C.², Lehman, D. and Yoo, J.H.¹ (2005) “Improved Design of Steel Frame Connections”, *International Journal of Steel Structures*, v.5, n.2, July 2005.

87. Lehman, D., Roeder, C. ², and Larson, R. ¹ (2005) “Design of Cotton Duck Bridge Bearing Pads”, *ASCE Journal of Bridge Engineering*, Volume 10, Issue 5, pp. 555-563 (September/October 2005).
88. Lehman, D., Moehle, J. ², Calderone, A. ³, Henry, H. ³ and Mahin, S. ² (2004) “Experimental Evaluation of Seismic Design Provisions for Circular Reinforced Concrete Columns”, *ASCE Journal of Structural Engineering*, June 2004. [54 cites]
89. Raynor, D. ¹, Lehman, D., and Stanton, J. ², (2002) “Bond-Slip Response of Reinforcing Bars Grouted in Ducts”, *ACI Structural Journal*, Sept.-Oct. 2002, Vol. 99, No. 5. [31 cites]
90. Kimura, Y., Tagawa, H., Lehman, D. and MacRae, G. ², (2001) “Report of Damage to Building Structures Caused by the Nisqually Earthquake in 2001”, *AIJ Journal of Technology and Design*, Architectural Institute of Japan, No. 14, pg. 373-376, December 2001.
91. Lehman, D., Elkin, S. ³, Nacamuli, A. ³, and Moehle, J. ² (2001) “Repair of Earthquake-Damaged Bridge Columns”, *ACI Structural Journal*, March-April 2001. [37 cites]
92. Elkin, S. ³, Nacamuli, A. ³, Lehman, D., and Moehle, J. (1999) “Seismic Performance of Damaged Bridge Columns”, *Earthquake Engineering and Engineering Seismology*, September 1999, Vol. 1, No.1.

Refereed archival journal discussions

1. Lehman, D., Roeder, C. and Zhao, M. (2020) Discussion of “Shear Strength of Composite Circular Reinforced Concrete-Filled Steel Tubes” by Hadi Kenarangi and Michel Bruneau. *ASCE Journal of Structural Engineering*, November 2020.
2. LaFave, J. ² and Lehman, D. “ Discussion of Test of High-Rise Core Wall: Effective Stiffness for Seismic Analysis (Title no. 104-S52) by Adebar and Ibrahim” *ACI Structural Journal*, July 2008.
3. Moehle, J.P. ², Rodriguez, A. ³ and Lehman, D., “Discussion of Simulated Seismic Load Tests on Reinforced Concrete Columns by Watson and Park,” *ASCE Journal of Structural Engineering*, February 1996, Vol. 122, No. 2.

Conference proceedings and other non-journal articles

Fully refereed publications (Last Update 2018)

1. Lehman, D. and Sumarell, J. EVALUATION OF RC FRAME BUILDINGS DAMAGED IN 2016 MEINONG EARTHQUAKE IN SOUTHERN TAIWAN. **Session Title: Tt011.** *Learning From Earthquakes I: Structural Observations*, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
2. Marafi, M., Lowes, L. and Lehman, D. COLLAPSE ANALYSIS OF RC WALL ARCHETYPES AND SENSITIVITY TO CONSTITUTIVE MODEL PARAMETER UNCERTAINTY, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
3. Welt, T., Lehman, D. and LaFave, J. BOUNDARY ELEMENT DETAILING IN SPECIAL CONCRETE STRUCTURAL WALLS. 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
4. Sen, A., and Lehman, D. REVISED ASCE-41 MODELING RECOMMENDATIONS FOR CONCENTRICALLY BRACED FRAMES, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018

5. Sen, A., Lehman, D., Berman, J. and Roeder, C. SEISMIC PERFORMANCE OF NONDUCTILE AND RETROFITTED CONCENTRICALLY BRACED FRAME BUILDINGS, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
6. Marafi, N., Berman, J., Eberhard, M., Roeder, C. and Lehman, D. ACCOUNTING FOR DEMAND VARIABILITY OF STEEL BRACED FRAMES WITH A COMBINED INTENSITY MEASURE, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
7. Palmer, K., Lehman, D. and Roeder, C. INELASTIC SYSTEM BEHAVIOR OF BUCKLING-RESTRAINED BRACED FRAMES AT MODERATE AND LARGE DRIFTS, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018
8. Sen, A., Ibarra, S., Lehman, D., Roeder, C. and Berman, J. CHEVRON BRACED FRAMES WITH YIELDING BEAMS: EXPERIMENTS AND NUMERICAL ANALYSIS, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018.
9. Mock, A., Lowes, L. and Lehman, D. SEISMIC PERFORMANCE OF SLENDER C-SHAPED WALLS SUBJECTED TO UNI- AND BI-DIRECTIONAL LOADING, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018.
10. Sen, A. Berman, J., Lehman, D. and Roeder, C. SEISMIC EVALUATION AND RETROFIT OF VULNERABLE CONCENTRICALLY BRACED FRAMES, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018.
11. Lowes, L. and Lehman, D. PROPOSED UPDATES TO ASCE 41 FOR MODELING OF FLEXURE-CONTROLLED REINFORCED CONCRETE WALLS, 11th National Earthquake Engineering Conference, Los Angeles CA, June 2018.
12. Sen, A. D., Roeder, C. W., Lehman, D. E., Berman, J. W. (2015). "How Big Is That Beam? Revisited." *Structure*. July 2015.
13. Welt, T.; Qureishi, A.; LaFave, J.; Lehman, D.; McCabe, S. (2014) "Performance of slender reinforced concrete structural walls under significant lateral loads" NCEE 2014 - 10th U.S. National Conference on Earthquake Engineering: Frontiers of Earthquake Engineering, 2014; DOI: 10.4231/D39882N40;
14. Stephens, M.T., Berg, L., Lehman, D.E., and Roeder, C.W. "Concrete-Filled Tubes for Accelerated Bridge Construction", Proceedings of the 10th National Conference on Earthquake Engineering 21 July – 25 July 2014, Anchorage, AK.
15. Sloat, D., Johnson, M., Berman, J., Roeder C. and Lehman, D. (2014) "Seismic Performance of Concentrically Braced Frame Connections" 10th National Earthquake Engineering Conference, Anchorage Alaska, August 2014.
16. Sen, A. Berman, J., Roeder C. and Lehman, D. (2014) "Numerical and Experimental Assessment of Chevron Braced Frames with Weak Beams" 10th National Earthquake Engineering Conference, Anchorage Alaska, August 2014.
17. Aviram, A., Kelly, D., Birely, A., Lowes, L. and Lehman, D. (2014) "Disparate Damage Levels from the 2010 Maule, Chile Earthquake in Two Similar Reinforced Concrete Shear Wall Buildings" 10th National Earthquake Engineering Conference, Anchorage Alaska, August 2014.
18. Birely, A., Lowes, L. and Lehman, D., Aviram, A., Kelly, D., (2014) "ASCE/SEI 31/41 Evaluations of Buildings Damaged in the 2010 Maule, Chile Earthquake" 10th National Earthquake Engineering Conference, Anchorage Alaska, August 2014.
19. Palmer, K.D., Roeder, C.W., Lehman, D.E. (2012). "A New Balanced Design Procedure for Gusset Plate Connections in SCBF." *Proceeding of the Fourth International Conference on Behavior of Steel Structures in Seismic Areas – STESSA 2012*, Santiago, Chile, January 2012.
20. Palmer, K.D., Roeder, C., Okazaki, T., Shield, C., Lehman, D. (2011), "THREE-DIMENSIONAL TESTS OF TWO-STORY, ONE-BAY BY ONE-BAY, STEEL CONCENTRIC BRACED FRAMES," 8th International Conference on Urban Earthquake Engineering, Tokyo, Japan
21. Roeder, C.W., Lehman, D.E., Hsiao, P.C., Palmer, K. (2011), "BRACED FRAMES FOR SEISMIC DESIGN IN URBAN AREAS," 8th International Conference on Urban Earthquake Engineering, Tokyo, Japan

22. Lehman, D. and Roeder, C. (2011) "Seismic Damage Mitigation of Precast Pile-to-Wharf Connections" PCI Convention, Salt Lake City UT, October 2011
23. Roeder, C.W., Lehman, D.E., Lumpkin, E., Hsiao, P-C, and Palmer K. (2011) "SCBF Gusset Plate Design," T.R. Higgins Lecture, AISC North American Structural Steel Conference, Pittsburgh, PA, May 11-14, 2011.
24. Palmer, K., Okazaki, T., Roeder, C., and Lehman, D. (2010) "Three Dimensional Tests of a Two-Story One-Bay Special Concentrically Braced Frame (SCBF) Specimen Designs and Details," 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25-29, 2010
25. Roeder, C.W., Lehman, D.E., Powell, J., and Hsiao, P.C. (2010) "Seismic Performance and Design of Gusset Plate Connections," 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25-29, 2010.
26. Roeder, C.W., and Lehman, D.E., (2010) "Concrete Filled Steel Bridge Piers for Improved Seismic Performance and Rapid Construction," 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25-29, 2010.
27. Roeder, C. W, Lehman, D.E., Jellin, A.R., and Brackmann, (2010) "Improved Pile-to-Wharf Connections to Reduce Seismic Damage of Wharfs," 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25-29, 2010.
28. Lehman, D.E., Roeder, C.W., Tsai, K-C, Hsiao, P-C, Lumpkin, E., Wei, Y-C, Wu, A-C, and Tsai, C-Y (2010) "Experimental Performance and Analytical Simulation of Three Story Full Scale Concentrically Braced Frame System," 9th US National and 10th Canadian Conference on Earthquake Engineering, Toronto, Canada, July 25-29, 2010.
29. Birely*, A., Lowes, L.N., Lehman, D.E., Marley, K., Hart, C., Kuchma, D. "Investigation of the Seismic Response of Slender Concrete Walls," *Proceedings of the 9th U.S. National and 10th Canadian Conference on Earthquake Engineering: 25-29 July 2010, Toronto, CA.* Oakland: EERI, July 2010. Paper 773. 10 p.
30. Birely*, A., Lowes, L.N., Lehman, D.E. "Practical Linear and Nonlinear Models of Reinforced Concrete Beam-Column Joints in Existing Structures," *Proceedings of the 9th U.S. National and 10th Canadian Conference on Earthquake Engineering: 25-29 July 2010, Toronto, CA.* Oakland: EERI, July 2010. Paper 694. 11 p.
31. Lehman, D. Lowes, L., Birley, A., Doepker, B. Kuchma, D., Hart, C. and Marley, K. (2008) "Performance Assessment of Modern Walled Buildings", Paper 27, SEAOC Annual Meeting Proceedings, September 2008.
32. Roeder, C.W., Lehman, D.E., Lumpkin, E., and Hsiao, P-C, (2009) " Seismic Evaluation and Rehabilitation of Concentrically Braced Frames," 2009 ATC/SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures, San Francisco, CA, Dec 9-11, 2009.
33. Roeder, C.W., and Lehman, D.E., (2008) "An Economical and Efficient Foundation Connection for Concrete Filled Steel Tube Piers and Columns," Proceedings, Engineering Foundation, Composite Construction VI, Winter Park. CO. July 2008 [3 cites]
34. Roeder, C.W., and Lehman, D.E. (2008) "Gusset Plate Connections for Seismic Design," Proceedings, CONNECTIONS VI, International Workshop on Connections in Steel Structures 2008, Chicago, IL, June 23-25, 2008.
35. Doepker, B., Lowes, L., and Lehman, D. (2008) "Evaluation of Practical Methods for Analysis of Reinforced Concrete Walls", ASCE/SEI, Proceedings of Structures Congress, Vancouver, BC Canada April 2008.
36. Lehman, D.E., and Roeder, C.W., (2008) "Improved Seismic Design of Concentrically Braced Frames and Gusset Plate Connections," ASCE/SEI, Proceedings of Structures Congress, Vancouver, BC Canada April 2008.
37. Powell, J., Clark, K., Lehman, D.E. Roeder, C.W., and Tsai, K.C. (2008) "Test of a Full Scale Concentrically Braced Frame with Multi-Story X-Bracing," ASCE/SEI, Proceedings of Structures Congress, Vancouver, B.C. Canada April 2008

38. Roeder, C.W., and Lehman, D.E. (2008) "Concrete Filled Steel Tubes for Rapid Construction of Bridge Piers," 2008 FHWA Accelerated Bridge Construction Conference - Highway for Life," Proceedings, Baltimore, MD, March 20-21, 2008.
39. Roeder, C. and Lehman, D. (2008) "Seismic Design and Behavior of Concentrically Braced Steel Frames", Structure Magazine, pp. 37-39, February 2008. [3 cites]
40. Roeder, C.W., and Lehman, D.E. (2007) "Emerging Trends in Design of Special Concentrically Braced Frames," Proceedings, Annual meeting, Structural Engineers Association of California, Lake Tahoe, California. September 2007.
41. Roeder, C.W., and Lehman, D.E., (2007) "SCBF Gusset Plate Connection Design," Proceedings, AISC, North American Steel Construction Congress, New Orleans, LA, April 2007.
42. Roeder, C.W., and Lehman, D.E., (2007) "Composite Action in Concrete Filled Steel Tubes," Keynote address, Pacific Structural Steel Conference 2007, Wairakei, New Zealand, 13-16 March, 2007
43. Roeder, C.W., Lehman, D.E., Johnson, S., and Herman, D., (2007) "Experimental Study of Seismic Performance of Braced Frame Gusset Plate Connections," Pacific Structural Steel Conference 2007, Wairakei, New Zealand, 13-16 March, 2007.
44. Lowes, L.N., Lehman, D.E., Kuchma, D. and J. Zhang. "Investigation of the Seismic Behavior and Analysis of Reinforced Concrete Structural Walls Using the UIUC NEES Facility." *Proceedings of the 2007 Structures Congress and Exposition. 16-19 May 2007, Long Beach, CA.*
45. Mohr¹, D., Lehman, D.E. and L.N. Lowes. "Performance-Based Design and Nonlinear Modeling of Coupled Shear Walls and Coupling Beams." *Proceedings of the 2007 Structures Congress and Exposition. 16-19 May 2007, Long Beach, CA.*
46. Doepker¹, B.D., Lehman, D.E. and L.N. Lowes, "Modeling the Behavior of Large Scale Shake Table Tests Using Linear Elastic Time History Methods," *Proceedings of the NEES/UCSD Seminar on Analytical Modeling of Reinforced Concrete Walls for Earthquake Resistance. San Diego, CA. December 2006.*
47. Kingsley, A.M., Williams, T.S., Lehman, D.E., and Roeder, C.W. (2006) "Experimental and analytical investigation of vanadium micro-alloyed concrete-filled tube-concrete footing connections," 11th International Symposium on Tubular Structures, Quebec City, Quebec, Canada, August 31-September 2, 2006.
48. Roeder, C.W., Lehman, D.E., Johnson, S., Herman, D., and Yoo, J.H., (2006) "Seismic Performance of SCBF Braced Frame Gusset Plate Connections," 4th International Conference on Earthquake Engineering, Taipei, Taiwan, October 12-13, 2006.
49. Yoo, J.H., Roeder, C.W., and Lehman, D.E. (2006) "Finite Element Simulation of Buckling Restrained Braced Frame Tests," 4th International Symposium on Steel Structures, November 16-17, 2006, Seoul, Korea.
50. Roeder, C.W., Lehman, D.E., Johnson, S., Herman, D., and Yoo, J.H. (2006) "Seismic Performance of Concentrically Braced Frames with Gusset Plate Connections," 4th International Symposium on Steel Structures, November 16-17, 2006, Seoul, Korea.
51. Herman, D. , Johnston, S. , Lehman, D. and Roeder, C., (2006) "Improved Seismic Design of Specially Concentrically Braced Frames", Proceedings of the Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006, Paper No. 1356.
52. Roeder, C., Lehman, D. and Christopolus, A., (2006) "Seismic Performance of Special Concentrically Braced Frames with Buckling Restrained Braces", Proceedings of the Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006, Paper No. 1503.
53. Kingsley, A. , Williams, T. , Lehman, D. and Roeder, C., (2006) "Experimental Investigation of Column-to-Foundation Connections for Concrete-Filled High-Strength Steel

- Tubes”, Proceedings of the Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006, Paper No. 1511.
54. Brown, P., Kuchma, D., Lehman, D., Lowes, L., Oyen, P., Sterns, A. and Zhang, J. (2006) “Investigation of the Seismic Behavior and Analysis of Reinforced Concrete Structural Walls”, Proceedings of the Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006, Paper No. 0352.
 55. Brown¹, P., J. Ji, P. Oyen¹, A. Sterns¹, D.E. Lehman, L.N. Lowes, D. Kuchma and J. Zhang. “Seismic Behavior, Analysis and Design of Complex Wall Systems.” *Proceedings of the 8NCEE: 18-22 April 2006, San Francisco, CA*. Oakland: EERI, April 2006. Paper 532. 12 p.
 56. Lehman D., Stanton J., Anderson M., Alire D., and Walker S. (2004) “Seismic Performance of Older Beam-Column Joints”, Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 1464.
 57. Lehman D., Roeder, C., Yoo, J.H., and Johnson, S. (2004) “Seismic Response of Braced Frame Connections”, Proceedings of the 13th World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 1-6, 2004, Paper No. 1459.
 58. Mormann¹, M. D. Lehman, L. Lowes, J. Stanton. “Modeling the Earthquake Response of Reinforced Concrete Beam-Column Joints.” *Proceedings of the 2003 ASCE/SEI Structures Congress and Exposition: Engineering Smarter, May 2003*. pp 329-334.
 59. Walker, S., Yeargin, C., Lehman D., and Stanton, J. (2002) "Performance-based Seismic Evaluation of Existing Joints" Proceedings of the Seventh U. S. National Conference on Earthquake Engineering, Paper # 673, May 2002.
 60. Lehman, D., Elkin, S., Nacamuli, A., and Moehle, J. (1998) “Repair of Moderately and Severely Damaged Bridge Columns”, Proceedings of the Sixth U. S. National Conference on Earthquake Engineering, Paper # 86, May 1998.
 61. Lehman, D., Calderone, A. and Moehle, J. (1998) “Behavior and Design of Slender Columns Subjected to Lateral Loading”, Proceedings of the Sixth U. S. National Conference on Earthquake Engineering, Paper # 87, May 1998. [16 cites]

Refereed by abstract only (Last update 2018)

1. Lehman, D. and Roeder C. (2019) “ Seismic Performance and Retrofit of NCBFs”, Steel Conference, St. Louis MO, April 2019.
2. Lehman D., Sen A., Roeder C. and Berman J. (2016) “ New Approaches and Design Methods for the Retrofit of Seismically Deficient Concentrically Braced Frames” SEAOC Convention 2016, Maui
3. Lowes L., Lehman, D. and Baker, C. (2016) “Recommendations for Modeling the Nonlinear Response of Slender Reinforced Concrete Walls” SEAOC Convention 2016, Maui
4. Stephens, M., Lehman, D. and Roeder, C. (2016) “Comparing the Seismic Performance of Conventional and Novel Structural Systems Using PBEE”, SEAOC Convention 2016, Maui
5. Stephens, M.T., Lehman, D.E., and Roeder, C.W. (2016) “Concrete Filled Steel Tube Connections for Precast Construction in Seismic Regions”, Proceedings of the 2016 PCI Convention and National Bridge Conference March 2016, Nashville, TN.
6. 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.
7. Stephens, M.T., Lehman, D.E., and Roeder, C.W. (2015a) “CFT Bridge Pier Connections for Accelerated Construction in Seismic Regions”, Proceedings of the 2015 National Accelerated Bridge Construction Conference 4 December – 5 December, Miami, FL.
8. Lehman, D., Lowes, L., Pugh, J., and Whitman, Z. (2015) Nonlinear Analysis Methods for Flexural Seismic Reinforced Concrete Walls. *Improving the Seismic Performance of Existing Buildings and Other Structures 2015*: pp. 57-73. doi: 10.1061/9780784479728.006

9. 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.
10. Lehman, D, Welt, T., and LaFave, J. (2015) "Recommendations for Confinement in Boundary Elements of Special Concrete Walls", SEAOC, Bellevue WA, September 2015.
11. Kuder, K., Lehman, D., Chen, J., Lowes, L. (2015) "Creep of SCM Concrete" SEAOC, Bellevue WA, September 2015.
12. Stephens, M.T., Berg, L., Lehman, D.E., and Roeder, C.W. "Circular Concrete Filled Tube Bridge Pier Connections for Accelerated Bridge Construction", Proceedings of the 2014 National Accelerated Bridge Construction Conference 4 December – 5 December, Miami, FL.
13. Stephens, M.T., Berg, L., Lehman, D.E., and Roeder, C.W. "Seismic Design of Circular Concrete Filled Tube Bridge Pier Connections for Accelerated Bridge Construction", Proceedings of the 2014 Structures Congress and Exposition 3 April – 5 April 2014, Boston, MA.
14. Birely, A., Lowes, L., and Lehman D. (2013) "Experimental Strain Fields of Reinforced Concrete Walls for Validation of Numerical Models", 5th International Conference on Advances in Experimental Structural Engineering, Nov. 2013, Taipei Taiwan.
15. Stephens, M.T., Roeder, C.W., Lehman, D.E., and Moon, J. (2013) "Seismic Design of Concrete Filled Tube Bridge Pier Connections for Accelerated Bridge Construction", Proceedings of Quake Summit 2013, 7 August - 8 August, Reno NV.
16. Stephens, M.T., Roeder, C.W., Lehman, D.E., and Moon, J. (2013) "Seismic Design of Concrete Filled Tubes and Their Connections", Proceedings of the Seventh National Seismic Conference on Bridges and Highways, 20 May - 22 May 2013, Oakland CA.
17. 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.
18. 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.
19. 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.
20. Roeder, C.W., Lehman, D.E., and Stephens, M.T. "Seismic Design of Concrete Filled Tubes and Their Connections", Proceedings of the 2013 EERI Annual Meeting, 12 February - 15 February 2013, Seattle WA.
21. Roeder, C. W., Lehman, D. E., Moon, J. (2012). "Circular concrete filled tubes for economical and rapid construction." *The 6th International Symposium on Steel Structures (ISSS2011)*, Seoul, Korea, November 3-5, 2012, pp. 1-13.
22. Moon, J., Lehman, D. E., and Roeder, C. W. (2012). "Finite element analysis of embedded connections for circular concrete-filled tube (CFT) columns." *10th International Conference on Advances in Steel Concrete Composite and Hybrid Structures (ASCCS 2012)*, Singapore, July 2-4, 2013.
23. Moon, J., Lehman, D. E., Ko, H. J., and Lee, H.-E. (2012). "Analytical simulation of axial behavior of RCFT wall." *The 2nd International Conference on Engineering and Technology Innovation 2012(ICETI2012)*, Kaohsiung, Taiwan, November 2-6, 2012.
24. Lehman, D., Lowes, L., Kuchma, D. (2012) "Behavior and Analysis of C-Shaped Walls" NEES Quake Summit, Boston MA, July 2012
25. Lehman, D. Roeder C., Hsaio, P, and Berman, J. (2012) "Seismic Vulnerability of Older Braced Frames", NEES Quake Summit, Boston MA, July 2012
26. Kuder, K. Lehman, D., Hannesson, G., Shogren, R., Berman, J. and Roeder, C. "High Volume Cement Replacement in Ternary SCC Mixes for Composite Construction" International Concrete Sustainability Conference, May 2012

27. Lehman, D., Roeder, D., Kuder, K. and Gunnarsson, A. "Concrete-Filled Tubes with High-Volume Cement Replacement Concrete for Structural Sustainability", International Concrete Sustainability Conference, May 2012
28. Lehman, D. and Lowes L. "Seismic Performance of Coupled Wall" *2011 SEAOC Convention*, Las Vegas, September 2011.
29. Lehman, D., Hsiao, P.C., Roeder, C. and Berman J. "Seismic Vulnerability of Older Braced Frames", *2011 SEAOC Convention*, Las Vegas September 2011.
30. Lehman, D. Hannsen, G., Berman, J. Roeder, C., Kuder, K. and Shogren, R. "SCM Rich Concrete in Composite Construction" *2010 SEAOC Convention*, September 2010.
31. Turgeon, J., Lowes, L.N., Lehman, D.E., Kuchma, D., Hart, C., Marley, K. "Seismic Behavior of a Modern Concrete Coupled Wall," Proceedings of the SEAOC Convention: 21-24 September 2011, Las Vegas, NV. 18 pp
32. Palmer, K.D., Okazaki, T., Roeder, C., Lehman, D. (2010), "Three-dimensional tests of two-story, one-bay by one-bay, steel braced frames: specimen design," *9th US National and 10th Canadian Conference on Earthquake Engineering*, Toronto, Canada.
33. Kuder, K., Wells, K., Shogren, R and Lehman, D.. "Low Portland Cement-Content SCC Mix Design for Use in Structural Applications," *Second International Conference on Sustainable Construction Materials and Technologies*, Ancona, Italy, June 2010, pp. 1263-1270.
34. Kuder, K.G., Wells, K., Shogren, R., Hannesson, G., Berman, J., Lehman, D., Roeder, C. "Low Portland Cement SCC for Composite Construction," NSF Workshop *Green Sustainable Buildings in Desert Environments*, Cairo, Egypt, Spring 2010
35. Roeder, C.W., and Lehman, D.E., (2009) "Research on Rapidly Constructed CFT Bridge Piers Suitable for Seismic Design," ASCE, TCLEE 2009 Conference, Oakland, CA, June 29-July 1, 2009.
36. Lehman, D.E., Roeder, C.W., (2009) "Improving the Seismic Performance of Pile-to-Wharf Connections," ASCE, TCLEE 2009 Conference, Oakland, CA, June 29-July 1, 2009.
37. Roeder, C.W., and Lehman, D.E. (2009) "Performance and Behavior of Gusset Plate Connections," North American Steel Construction Conference, AISC, Phoenix, Arizona, April 2009.
38. Roeder, C.W., Lehman, D.E., and Thody, Ryan, (2009) "Research for Concrete Filled Steel Tubes for US Construction, 5th International Symposium on Steel Structures, Seoul, Korea, March 2009.
39. Birely*, A., Lowes, L.N., Lehman, D.E. "A Practical Model for Beam-Column Connections Behavior in Reinforced Concrete Frames," *Proceedings of the 2009 ATC&SEI Conference on Improving the Seismic Performance of Existing Buildings and Other Structures*, San Francisco, December 2009.
40. Lowes, L.N., Lehman, D.E., Birely*, A., Pugh, J., Kuchma, D., Hart, C., Marley, K. (2009) "Investigation of the Seismic Response of Slender Concrete Walls." *Proceedings of the SEAOC 2009 Convention, September 2009, San Diego, CA*
41. Birely*, A., Lehman, D.E., Lowes, L.N. "A Practical Model for Beam-Column Connection Behavior in Reinforced Concrete Frames," (2009) *Proceedings of the 2009 Structures Congress and Exposition 29 April – 1 May 2009, Austin, TX*.
42. Clark, K., Powell, J., Lehman, D., Roeder, C., and Tsai, K.C. (2008) Experimental Performance of Multi-Story X-Braced Frame Systems, Paper 26, *SEAOC Annual Meeting Proceedings*, September 2008.
43. Birely, A., Lehman, D., Lowes, L., Kuchma, D., Hart, C., and Marley, K., "Investigation of the Seismic Behavior and Analysis of Reinforced Concrete Structural Walls", Proceedings of the 14th World Congress in Earthquake Engineering, Beijing, China, October 12-17, 2008.
44. Hart, C., Kuchma, D., Lowes, L., Lehman, D., Marley, K., and Birely, A., "Testing of RC Walls Using Advanced Load-Control and Instrumentation Methods", Proceedings of the 14th World Congress in Earthquake Engineering, Beijing, China, October 12-17, 2008. [2 cites]

45. Birely, A., Lowes, L. and Lehman D. (2008) "Practical Modeling of Reinforced-Concrete Beam-Column Joints in Non-Ductile Structures, SEAOC Annual Meeting Proceedings, September 2008.
46. Kingsley, A. , Williams, T. , Lehman, D., and Roeder, C. (2006) "Experimental and Analytical Investigation of Vanadium Micro-alloyed Concrete-filled Tube Footing Connections", ISTSS, Quebec, Canada, August 2006.
47. Roeder, C. Lehman, D., and Yoo, J. (2006) "Finite Element Simulation of Special Concentrically Braced Frame Tests", STESSA 2006, Yokohama Japan, August 2006.
48. Roeder, C., and Lehman, D., (2005) "Seismic Design of Braced Frame Gusset Plate Connections," Fifth International Conference on Earthquake Resistant Engineering Structures, Skiathos, Greece, May 28-June 1, 2005.
49. Roeder, C., Lehman, D., and Yoo, J. (2004) "Performance-Based Design of Gusset-Plate Braced Frame Connections", Connections in Steel Structures V - Innovative Steel Connections, Radisson SAS Hotel, Amsterdam, The Netherlands, June 3-4, 2004.
50. Roeder, C., Lehman, D., and Yoo, J. (2004) "Performance-Based Design of Braced Frame Connections", Seventh Pacific Structural Steel Conference, Long Beach, CA, March 2004, sponsored by AISC, Chicago, IL.
51. Anderson, M. , Lehman, D., and Stanton, J. (2003) "A Constitutive Model for Beam-Column Joint Shear Response in Older Construction", ASCE Structures Congress, May 2003.
52. Larson, R. , Lehman, D., and Roeder, C. (2001) "Response of Cotton Duck Elastomeric Bearing Pads to Static and Dynamic Loading", 5th NSF Workshop on Bridge Research in Progress, Minneapolis, MN, October 2001.
53. Walker, S. , Yeargin, C., Lehman, D., and Stanton, J. (2001) "Influence of Joint Shear Stress Demand and Displacement History on the Seismic Performance of Beam-Column Joints", US-Japan Workshop on Performance-Based Seismic Design of Reinforced Concrete Buildings, Seattle WA, August 2001.
54. Lehman, D., Mosier, W., and Stanton, J. (2000) "Seismic Assessment of Reinforced Concrete Beam-Column Joints", US-Japan Workshop on Performance-Based Seismic Design of Reinforced Concrete Buildings, September 2000.
55. Lehman, D. and Moehle, J. (2000) "Performance-Based Seismic Design of Reinforced Concrete Bridge Columns", Twelfth World Earthquake Engineering Conference, New Zealand, January 2000. [2 cites]
56. Lehman, D. and Moehle, J., "Influence of Longitudinal Reinforcement Ratio on Column Response", Eleventh European Earthquake Engineering Conference, Paris, France, September 1998.
57. Lehman, D. and Moehle, J., "Influence of Longitudinal Reinforcement Ratio on Column Response", Second National Seismic Conference on Bridges and Highways, Sacramento, CA, 1997.
58. Lehman, D., Moehle, J. and Mahin, S., "Design of an Experimental Study on the Influence of Aspect Ratio and Longitudinal Reinforcement Ratio on Column Response", Fourth Caltrans Seismic Research Workshop, Sacramento, CA, July 1996.
59. Lehman, D., Lynn, A., Aschheim, M., and Moehle, J., "Evaluation Methods for Reinforced Concrete Columns and Connections", Eleventh World Conference on Earthquake Engineering, Acapulco, Mexico, June 1996. [10 cites]
60. Moehle, J. and Lehman, D., "Evaluation and Upgrading of Existing Reinforced Concrete Buildings", Advances in Earthquake Engineering Practice, Berkeley, CA, May 1994.

Abstracts, letters, non-refereed papers, technical reports

1. Roeder, C. and Lehman D. (2016) "Shear Strength of CFST Bridge Piers", Final Report for the Washington Department of Transportation.

2. Eberhard, M.O., Stanton, J.F., Tran, H.V., Stephens, M.T., Lehman, D.E., Roeder, C.W., Barbosa, A.R., Trejo, D., Link, T., Nielson, D., Manzarei, V. (2015) "High Performance Bridge Systems for Lifeline Corridors in the Pacific Northwest", Final Report for the Pacific Northwest Transportation Consortium. Report Number PACTRANS12-03.
3. Stephens, M.T., Lehman, D.E., and Roeder (2015b) "Concrete-Filled Tube Bridge Pier Connections for Accelerated Bridge Construction", Final Report for the California Department of Transportation. Report Number CA15-2417.
4. Roeder, C.W., Lehman, D.E., and Stephens, M.T. "Seismic Design of Concrete Filled Tubes and Their Connections", Proceedings of the 2013 EERI Annual Meeting, 12 February - 15 February 2013, Seattle WA.
5. Roeder, C.W., Lehman, D.E., Stephens, M.T., and Moon, J. "Seismic Design of Concrete Filled Tubes and Their Connections", Proceedings of the Western Bridge Engineers Seminar, 3 September - 6 September 2013, Bellevue WA.
6. Stephens, M.T., Roeder, C.W., Lehman, D.E., and Moon, J. "Seismic Design of Concrete Filled Tube Bridge Pier Connections for Accelerated Bridge Construction", Proceedings of Quake Summit 2013, 7 August - 8 August, Reno NV.
7. Lehman, D. and Roeder, C. (2012) "Foundation Connections for Concrete-Filled Tube Columns in High Seismic Regions", Final Report to the California Department of Transportation.
8. Roeder, C. and Lehman, D. (2012) "Connections and Engineering Properties of CFT Cassions", Final Report to the Washington Department of Transportation.
9. Lehman, D. Hannesson, G., Kuder, K. (2010) "Mechanical Properties of High-Volume SCM Concretes", Final Report to Transportation Northwest
10. 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.
11. Inouye, B., Lehman, D. and Stanton, J. (2004) "Seismic Evaluation of the SR-99 Spokane Street Overcrossing", Final Report to Washington State Department of Transportation, Olympia, WA.
12. Lehman, D.E, Roeder, C.W., Larsen, R.A., and Curtin, K., (2003) "Cotton Duck Bearing Pads: Engineering Evaluation and Design Recommendations," Final Report to Washington State Department of Transportation, Olympia, WA.
13. Roeder, C.W., Lehman, D.E., and Larsen, R., (2002) "Strength, Stiffness and Durability of Cotton Duck Bearing Pads for Bridge Applications," Final Report to Arkansas State University, Dept. of Civil Engineering, U. of Washington, Seattle, WA, August 2002.
14. Lehman, D.E. Performance Characterization of Non-Ductile Building Frame Components, PEER Report Series, in press.
15. Calderone, A., Lehman, D., Moehle, J. (2001) Behavior of Reinforced Concrete Bridge Columns Having Varying Aspect Ratios and Varying Lengths of Confinement, PEER 2000/08, Jan 2001, 136 pp. [23 cites]
16. Lehman, D. and Moehle, J. (2000) Performance-Based Seismic Design of Well-Confined Concrete Columns, PEER Research Report 1998/01, December 2000. [92 cites]
17. Lehman, D. (1998) Performance-Based Seismic Design of Well-Confined Concrete Columns, Ph.D. Dissertation, University of California, Berkeley, CA, October 1998.
18. Moehle, J., Nicoletti, J. and Lehman, D., (1994) *Review of Seismic Research Results on Existing Buildings, Product 3.1 of the Proposition 122 Seismic Retrofit Practices Improvement Program*, SSC Report No. 94-03, Fall 1994.
19. Architectural Institute of Japan, *Preliminary Reconnaissance Report of the 1995 Hyogoken-Nanbu Earthquake, English Edition*, April 1995.
20. Moehle, J. P. Editor, *Preliminary Report on the Seismological and Engineering Aspects of the January 17, 1994 Northridge Earthquake*, EERC, UBC/EERC-94/01, January 1994.

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

UTC Webinar: Concrete Filled Steel Tube Bridge Pier Connections – An ABC Solution

https://abc-utc.fiu.edu/mc-events/concrete-filled-steel-tube-bridge-pier-connections-an-abc-solution/?mc_id=148

ATC Webinar: "Assessment of the Performance of Slender Reinforced Concrete Walls under Significant Lateral Loads"

NEES Webinar "Behavior, Design and Analysis of Slender RC Walls"

<https://www.scribd.com/document/137803891/2013-NEES-Webinar-Lowes-Lehman-Slides>

NEESR Wall Project You Tube:

<http://www.youtube.com/user/NEESRWallProject?feature=watch>

NEES Wall Test Documentation including Data, Reports and Publications:

<http://nees.org/resources/3677>

International Hybrid Simulation of Tomorrow's Concentrically Braced Frame Database:

<http://nees.org/warehouse/project/605>

Research to Practice Webinar: Improving Seismic Performance of Concentrically Braced Frames

<http://nees.org/announcements/researchtopractice-improvingseismicperformance>

OTHER SCHOLARLY ACTIVITY

Invited lectures and seminars

1. Seismic Resilient Concrete-Filled Steel Tube Substructures, Part of the In-depth Webinar Training
2. "CFST Components and Connection for Transportation Infrastructure", PEER Researcher Workshop, August 2019.
3. "CFST Pile Foundations and Connections", Portland OR, May 2019.
4. "CFST Connections", Webinar for FIU FHWA ABC Center Research Day, May 2019.
5. "Use of CFSTs for Deep Foundations", SuperPile, Seattle WA, May 2019.
6. "Seismic Evaluation and Retrofit of Concentrically Braced Frames" Steel Conference, St. Louis MO, April 2019.
7. "Seismic Performance of Chevron-Configured SCBFs with Yielding Beams", SEAW EEC, March 2019.
8. "Seismic Evaluation of Frame Structures Damaged in the 2016 Southern Taiwan Earthquake", ATC 134 Project Review Panel Meeting, June 2018.
9. "Recommendations for Analysis, Design and Detailing of Walls in Regions of High Seismicity", Webinar, Civil Engineering Department Seminar Series, University of British Columbia, March 2018.
10. "Seismic Behavior and Design of Concrete Walls", 500 Seminar Series, CEE UW, March 2018.
11. "Concrete Filled Steel Tubes: Structural and Geotechnical Response" WSDOT, January 2018.
12. "Concrete Filled Steel Tube Piles" Caltrans, October 2017.
13. "Design and Analysis Tools for Performance-Based Earthquake Engineering of Structural Walled Buildings" UC Davis, October 2017.

14. "New Recommendations for Seismic Design and Analysis of Structural Walled Buildings", KPFF.
15. "Improved Seismic Performance using Concrete Filled Tubes" (2017) Structural Engineers Associate of Northern California.
16. "Impact of Stiffness Irregularities on Collapse Potential of Walled Buildings" (2017) BSSC PUC Issue Team on Shear Walls.
17. "Detailing Recommendations for Wall Boundary Elements" (2015) Earthquake Engineering Committee of SEAW, Seattle WA
18. "Recommendations for Boundary Element Detailing in Special Concrete Walls" (2015) Wall Institute, Santa Barbara, CA
19. "Experimental Evaluation of Boundary Elements in Planar Concrete Walls" (2014) Wall Institute, UCLA.
20. "Resilient and Rapid Construction of Concrete Filled Tube Bridges" (2014) Earthquake Engineering Committee of the California Department of Transportation, January 2014.
21. "Rapid Construction of CFT Bridges" (2013) University of Texas at Austin, September 2013.
22. "Improving the Seismic Performance of Concentrically Braced Frames with Buckling and Buckling-Restrained Braces" (2013), KPFF Engineers, Portland OR, July 2013.
23. "Seismic Performance of Braced Frames: Analysis and Performance Assessment", (2013) Cast Connect Technical Seminar, Seattle, WA, July 2013.
24. "Concrete Filled Tubes for Accelerated Bridge Construction" (2013) AISI Steel Bridge Meeting, February 2013.
25. "Performance Evaluation of New and Older Braced Frames", (2012) AISC Steel Camp, Portland OR, July 2012, 3-hour seminar
26. "Accelerated Bridge Construction with Concrete Filled Tube Components" (2012), NCHRP 20-68A Domestic Scan Visit to Washington State. April 2012
27. "Seismic Performance of Structural Walls", (2012) ACI 374 Committee, ACI Convention, March 2012
28. "Evaluation of Older Walls", (2012) ACI 369, ACI Convention, March 2012
29. "Seismic Performance of Structural Walls", (2012) SEAW Earthquake Engineering Committee, March 2012
30. "Improving Seismic Performance of Concentrically Braced Frames", (2012) NEES-EERI Webinar, February 2012
31. "Improving Seismic Performance of Concentrically Braced Frames", (2012) SEAOSC Seminar, February 2012, 4-hour seminar
32. "Accelerated Bridge Construction through Concrete Filled Tubes", (2011), Skyline Steel Workshop, San Francisco CA, March 2011
33. "Accelerated Bridge Construction through Concrete Filled Tubes", (2011), Skyline Steel Workshop, Chicago IL, March 2011
34. "Accelerated Bridge Construction through Concrete Filled Tubes", (2010), Skyline Steel Workshop, Toronto CA, December 2010.
35. "Pile-to-Wharf Connection for Improved Seismic Performance", (2010) PEER Transportation Research Meeting, August 2010
36. "Accelerated Bridge Construction through Concrete Filled Tubes", (2010), California Department of Transportation, February 2010.
37. "Advances in Connections for SCBFs", (2009) Magnussun Klemencic Associates, February 2009.
38. "Damage-Resistant Pile-to-Wharf Connections" (2009) Seismic-Mitigation of Port Systems, Georgia Tech, February 2009.
39. "Part-Time Faculty Position: An Oxymoron?"(2008) Advance Quarterly Leadership Workshop, February 2008.

40. "Emerging Trends in the Seismic Design of Braced Frames" (2007) SEAOC Annual Meeting, Lake Tahoe, CA, September 2007.
41. "Rapid Construction using Concrete-Filled Tube Piers and Columns", (2006) WashDOT Seminar, Washington Department of Transportation, Olympia, WA, July 2006.
42. "Seismic Response of Beam-Column Connections", (2006) Seminar on Seismic Performance of Existing Reinforced Concrete Buildings. Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006.
43. "CFVST in Military Structural Applications", (2006) Vanadium In-Process Review, Pittsburgh, PA, March 2006.
44. "Seismic Performance of Connections in SCBFs", (2006), Georgia Institute of Technology, Structural Engineering Seminar, Atlanta, GA, January 2006.
45. "Seismic Response of Beam-Column Connections", (2006) PEER Annual Meeting, San Francisco, CA, January 2006.
46. "Concrete-Filled Tube Elements for Army Structural Applications", (2005) Vanadium In-Process Review, Pittsburgh, PA, April 2005.
47. "High-Strength Vanadium-Alloy Columns and Their Connections", (2005) ACI Committee 335, Composite Construction, April 2005.
48. "Engineering Evaluation and Design of Cotton Duck Bearing Pads", (2003) Washington Department of Transportation, Lacey, WA, June 2003.
49. "Performance of Non-ductile Building Components", (2003) PEER-NSF Site Review, Berkeley, CA, May 2003.
50. "Research Needs in Performance-Based Seismic Evaluation of Non-Ductile R/C Buildings", (2003) PEER Annual Meeting, Palm Springs CA, February 2003.
51. "Experimental Evaluation of Non-Ductile Reinforced Concrete Beam-Column Joints", (2001) US-Japan Workshop on Performance-Based Seismic Design of Reinforced Concrete Buildings, Seattle WA, August 2001.
52. "Performance-Based Seismic Assessment of Non-Ductile Building Components", (2001) Structural Engineers Association of Washington, Lateral Forces Committee, Seattle, WA, July 2001.
53. "Response of Non-Ductile Building Components", (2001) NSF Site Review, PEER center, May 2001.
54. "Building Component Characterization", (2000) PEER Annual Meeting, Berkeley, CA, January 2000.
55. "Seismic Performance of Reinforced Concrete Beam-Column Connections", (2000) US-Japan Workshop on Performance-Based Seismic Design of Reinforced Concrete Buildings, September 2000.
56. "Capacity Assessment", (2000) PEER-NSF Site Review, PEER Research Center, Richmond CA, May 2000.
57. "Performance-Based Seismic Engineering of Reinforced Concrete Structures", (1999) Workshop for Engineering Educators, NSF, Washington DC, September 1999.
58. "Performance Evaluation of Modern Bridge Columns", (1998), University of Washington Faculty Seminar Series, Seattle WA, November 1998.
59. "Performance-Based Design of Bridge Columns", (1998), UCD Seminar Series, Davis CA, March 1998.
60. "Performance Evaluation of Modern Bridge Columns", (1998), University of Kansas Seminar Series, Lawrence KS, February 1998.
61. "Performance Evaluation of Modern Bridge Columns", (1998), University of Massachusetts Seminar Series, Amherst MA, February 1998.
62. "Performance Evaluation of Modern Bridge Columns", (1997), UCSD Seminar Series, November 1997.

63. "Performance Evaluation of Modern Bridge Columns", (1997), UCLA Seminar Series, May 1997.

Presentations given at conferences (only selected presentations made by Lehman listed/student or other colleague presentations are not listed)

1. "Triage Procedures for Non-Ductile Concrete Buildings", 11th National Conference on Earthquake Engineering, Los Angeles, CA June 2018
2. "New Nonlinear Analysis Constitutive Models for Concentrically Braced Frames", 11th National Conference on Earthquake Engineering, Los Angeles, CA June 2018
3. "Investigation of Openings on RC Walled Buildings", Structures Congress, Ft. Worth TX, April 2018
4. "Triage Procedures for Non-Ductile Concrete Buildings", Structures Congress, Ft. Worth TX, April 2018
5. "Shear Strength of Concrete Filled Tubes", ABC Convention, December 2017, Miami, FL.
6. "Comparing the Performance of Reinforced Concrete and Concrete Filled Steel Tube Bridge Systems Subjected to Seismic and Tsunami Hazards", ABC Convention, December 2017, Miami, FL.
7. "Design of Accelerated Construction Connections for Concrete Filled Tubes", ABC pre-convention workshop, December 2017, Miami FL
8. "Performance-Based Design of Structural Concrete Walls", ACI Fall Convention, October 2017.
9. "Concrete-Filled Tubes for Accelerated Bridge Construction", Western Bridge Conference, Portland OR, September 2017.
10. "Impact of Stiffness Irregularities on Collapse Potential of Walled Buildings", Tall Buildings Council, LA, May 2017.
11. "New Approaches and Design Methods for the Retrofit of Seismically Deficient Concentrically Braced Frames", SEAOC Convention 2016, Maui Hawaii
12. "Comparing the Seismic Performance of Conventional and Novel Structural Systems Using PBEE", SEAOC Convention 2016, Maui Hawaii
13. "CFT Bridge Pier Connections for Accelerated Construction in Seismic Regions", PCI/National Bridge Conference, Nashville, TN, March 2016
14. "CFT Bridge Pier Connections for Accelerated Construction in Seismic Regions", Accelerated Bridge Conference, Miami FL, December 2015
15. "New Connection Design Methods and Standardized Design Procedures for CFT", Special Session organized by WSDOT, Miami FL, December 2015.
16. "Recommendations for Confinement in Boundary Elements of Special Concrete Walls", SEAOC, Bellevue WA, September 2015.
17. "Rapid Construction of CFT Bridges", Transportation Research Board, January 2014, Washington DC.
18. "CFT Bridges in High Seismic Zones", ACI, Phoenix AZ, October 2013.
19. "Evaluation of detailing and other aspects of walls design: Chile 2010 and beyond", ACI, Phoenix AZ, October 2013.
20. "Use of Concrete Filled Tubes as Drilled Shafts in Bridges", AASHTO, Portland OR, July 2013.
21. "Performance-Based Design of Walls" NEES Annual Meeting, July 2012, Boston MA
22. "Seismic Evaluation of Older Braced Frames" NEES Annual Meeting, July 2012, Boston MA
23. "Precast Pile-to-Wharf Connections for High Seismic Regions" ACI Convention, Dallas TX, March 2012
24. "Seismic Behavior, Analysis and Design of Complex Wall Systems" ACI Convention, Dallas TX, March 2012

25. "Seismic Damage Mitigation of Precast Pile to Wharf Connections" PCI Convention, Salt Lake City UT, October 2011
26. "Seismic Performance of Coupled Walls" SEAOC Annual Meeting, Las Vegas NV, September 2011
27. "Seismic Vulnerability of Older (pre-1988) Steel Braced Frames" SEAOC Annual Meeting, Las Vegas NV, September 2011
28. "SCM Rich Concrete in Composite Construction", (2010) SEAOC Annual Meeting, Palm Springs CA, September 2010
29. "Seismic Performance of a Three-Story Braced Frame" (2010) 9th National Earthquake Engineering Meeting, August 2010
30. "Seismic Performance of Planar Concrete Walls" (2010) 9th National Earthquake Engineering Meeting, August 2010
31. "Concrete Filled Tubes for Rapid Construction of Bridges", (2010), Seismic Committee, TRB, Washington DC January 2010
32. "Seismic Performance of Structural Concrete Walls", (2009), SEAOC Annual Meeting, San Diego CA September 2009
33. "Experimental Evaluation of Planar Walls", (2008), SEAOC Annual Meeting, Hawaii, September 2008
34. "Emerging Trends in Seismic Design of Concentrically Braced Frames", (2008), NEES Annual Meeting, Portland OR, June 2008.
35. "Seismic Performance of Planar Walls", (2008), NEES Annual Meeting, Portland OR, June 2008.
36. "Seismic Performance of Special Concentrically Braced Frames with Buckling Restrained Braces", (2006) Eighth National Conference on Earthquake Engineering, San Francisco, CA, April 2006.
37. "Seismic Performance of Bridge Columns", (2005) ACI Spring Convention, Charleston North Carolina, March 2005.
38. "Seismic Evaluation and Retrofit Techniques for Reinforced Concrete Bridges", (2004) ACI Spring Convention, March 2004.
39. "AASHTO Design Criteria for Cotton Duck Bearing Pads", (2004) TRB Annual Meeting, Washington DC, January 2004.
40. "Engineering Evaluation of Cotton Duck Bearing Pads", (2003) AASHTO Annual Meeting, Albuquerque, NM, June 2003.
41. "Simulation of Beam-Column Joint Performance", (2003) ASCE Structures Congress, Seattle, WA, May 2003.
42. "Performance-Based Design of Bridge Columns: Field and Laboratory Observations", (2003), ACI Spring Convention, Vancouver British Columbia, March 2003.
43. "Seismic Performance of Beam-Column Joints", (2000), ACI Fall Convention, Toronto, Canada, October 2000.
44. "Seismic Performance of Non-Participating Elements", (2000), ACI Spring Convention, San Diego CA, March 2000.
45. "Performance-Based Seismic Design of Bridge Columns", (2000), ACI Spring Convention, San Diego CA, March 2000.
46. "Performance-Based Seismic Design of Bridges", (2000), World Conference on Earthquake Engineering, Auckland, New Zealand, January 2000.
47. "Seismic Design of Reinforced Concrete Bridges", (1999), ACI Fall Convention, Baltimore MD, November 1999.
48. "Seismic Design and Repair of Reinforced Concrete Bridge Columns", (1998), Industrial Liaison Program, U. C. Berkeley, Berkeley CA, March 1998.
49. "Influence of Longitudinal Reinforcement Ratio on Column Response", (1997), National Seismic Conference on Bridges and Highways, Sacramento, CA, July 1997.

50. “Strength and Stiffness Degradation in Bridge Columns,” ACI Spring Convention, (1997), Seattle WA, May 1997.
51. “Design of an Experimental Study on the Influence of Aspect Ratio and Longitudinal Reinforcement Ratio on Column Response,” (1996), Fourth Caltrans Seismic Research Workshop, Sacramento, CA, July 1996.

Professional society memberships

American Society of Civil Engineers
American Concrete Institute
American Institute of Steel Construction

GRADUATE STUDENTS

Chaired/co-Chaired Doctoral Degrees

Student Name	Dissertation Title (Funding Agency)	Completed (Year)	Current Employer
Nicolette Lewis (with Motley)	Assessment of Tsunami Demands on Vertical Evaluation Structures including Fluid-Structure Interaction (National Science Foundation)	2025 (expected)	
Andrew Sen (with Roeder and Berman)	Improving Non-Ductile Chevron Braced Frames through Retrofit Technologies (National Science Foundation/AISC)	2018	University of Washington (Postdoc)
Kamal Ahmed (with Lowes)	Investigation of the Behavior and Seismic Performance of Flanged Walls using High Performance Analytical Simulation	(expected 2021)	
Travis Welt (with Jim Lafave at UIUC)	Compressive Response of Boundary Elements in Seismic Concrete Walls (NIST)	2015	University of St. Thomas, Assistant Professor
Max Stephens (with Roeder)	CFT Column to Cap Beam Connections for Rapid Construction of Bridges (Caltrans)	2016	University of Pittsburg
Josh Pugh (with Lowes)	Analysis Methods for Slender and Squat Concrete Walls (NSF/ATC)	2012	Structural Engineer at EDG Consulting Engineers
Keith Palmer (with Roeder)	Bi-directional Loading Effects on SCBFs with Buckling and Buckling Restrained Braces (NSF/AISC)	2012	Senior Staff II - Structural Engineering, Simpson Gumpertz & Heger Inc
Po-Chien Hsaio (with Roeder)	Engineering Tools for PBEE of SCBFs (NSF/AISC)	June 2012	NCREE/STC
Anna Birley (with Lowes)	Performance-Based Engineering of Complex Wall Systems (NSF/ATC)	2012	Civil Engineering, Texas A&M
Jung Han Yoo (with Roeder)	Analytical Investigation on the Seismic Performance of Special	2006	Seoul National University of Science and Technology

	Concentrically Braced Frames (NSF/AISC)		
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Chaired/co-Chaired Masters Degrees

Student Name	Level of Supervision	Thesis (funding agency)	Completed (Year)	Current Employer
Ray Yu (with Lowes)	Thesis	Ready Mix Concrete Foundation	2021 (expected)	
Joseph Kaldestad (with Roeder & Berman)	Thesis	AISC	2021 (expected)	
Will Bergendahl (with Roeder & Berman)	Thesis	AISC	2021 (expected)	
Spencer Lindsley (with Roeder)	Thesis	PEER	2021 (expected)	
Austin Anderson (with Roeder)	Thesis	NSF	2020 (expected)	
Stephen Ahn (with Calvi)	Thesis	ACI	2020	TBD
Ken Sullivan (with Roeder)	Thesis	NSF	2020	TBD
Chris Pyke (with Roeder)	Thesis	NSF	2020	TBD
Alec Yuetter (with Roeder)	Thesis	NSF	2020	KPFF
Jakob Sumearll (with Lowes)	Thesis	ATC	2019	KPFF
Sara Ibara (with Roeder and Berman)	Thesis	AISC	2018	KPFF
Clare Terpstra (with Roeder & Berman)	Thesis	AISC	2017	Degenkolb Engineers
Francesca Galeotti	Thesis	NSF	2017	KPFF
Marsha Swatosh (with Roeder and Berman)	Thesis	NSF/AISC	2016	CPL
Ashley Heid (with Roeder)	Thesis	Valle/WSDOT	2016	KPFF
Todd Maki (with Roeder)	Thesis	WSDOT	2015	CPL
Ryan Ballard (with Berman and Roeder)	Thesis	NSF	2015	KPFF
Zach Whitman (with Lowes)	Thesis	ATC	2015	CPL
Kevin Martin (with Roeder)	Thesis	WSDOT	2014	
Molly Johnson (with Berman and Roeder)	Thesis	AISC	2014	SGH
Lisa Berg (with Roeder)	Thesis	PacTrans	2014	KPFF

Student Name	Level of Supervision	Thesis (funding agency)	Completed (Year)	Current Employer
Dan Sloat (with Berman and Roeder)	Thesis	NSF	2014	Degenkolb
Zach Whitman	Thesis	ATC	2015	n/a
Arni K Gunnarsson with Berman and Roeder)	Thesis	TransNow	2012	Verkis Consulting Engineers
Kenneth O'Neill (with Roeder)	Thesis	Caltrans	2012	Reid Middleton
Guðmundur Marteinn Hannesson (with Roeder)	Thesis	TransNow	2010	EFLA - consulting engineers
Aaron Olson (with Berman and Roeder)	Thesis	WashDOT	2011	Senoir Structural Engineer at Van Sickle, Allen
Jake Turgeon (with Lowes)	Thesis	NSF	2011	HGA Integrated Engineers and Architects
Maurizio Chiamonte (with Roeder)	Thesis	PEER	2011	Ph.D. Student Stanford University
Jason Lee (with Roeder)	Thesis	Caltrans	2011	KPFF Consulting Engineers
Stuart Stringer (with Roeder)	Thesis	PEER/Moffit and Nicol	2011	Berger/ABAM Consulting Engineers
Eric Bishop (with Roeder)	Thesis	(California Department of Transportation)	2009	Reid/Middleton
Eric Lumpkin (with Roeder)	Thesis	(NSF)	2009	Senior Engineer at Thornton Tomasetti
Emily Brackman (with Roeder)	Thesis	(NSF)	2009	Moffatt & Nichol
Jacob Powell (with Roeder)	Thesis	(NSF)	2010	n/a
Kelly Clark (with Roeder)	Thesis	(NSF)	2009	Disaster Assistance Employee-Public Assistance at FEMA
Amanda Jellin (with Roeder)	Thesis	Improved Connections for Pile-Wharf Construction (NSF)	August 2008	HDR Engineering
Blake Doepker (with Lowes)	Thesis	(NSF)	December 2008	unknown

Student Name	Level of Supervision	Thesis (funding agency)	Completed (Year)	Current Employer
Wayne Brown (with Stanton)	Thesis	Effect of Spiral Properties on Bar Buckling in Bridge Columns (NSF through PEER Center)	2008	Degenkolb Engineers
Danya Mohr (with Lowes)	Thesis	Nonlinear Analysis and PBEE for Reinforced Concrete Coupled Shear Walls (NSF)	2007	Magnussun Klemencic Associates
Claudio Esteban Osses-Henriquez (with Lowes)	Thesis	Advancements on the Disturbed Stress Field Model (NSF)	2007	KPFF Consulting Engineers
Brandon Kotulka (with Roeder)	Thesis	Analysis for a Design Guide on Gusseat Plates used in SCBFs (NSF)	2007	KPFF Consulting Engineers, Special Projects Division
David Herman (with Roeder)	Thesis	Further Improvements on SCBFs (NSF)	2007	Magnussun Klemencic Associates
Ryan Thody (with Roeder)	Thesis	Experimental Investigation of Flexural Properties of High-Strength CFTs (ARMY)	2006	Design Engineer at DBM Contractors
Paul Oyen (with Lowes)	Thesis	Evaluation of Analytical Tools for Determining the Seismic Response of Walls (NSF)	2006	Structural Engineer, Simpson Gumpertz and Heger Los Angeles
Travis Williams (with Roeder)	Thesis	Experimental Investigation of High-Strength CFTs with Embedded Column Connections (ARMY)	2006	unknown
Dylan Freytag (with Stanton)	Thesis	Bar Buckling in Reinforced Concrete Bridge Columns (NSF through PEER Center)	2006	Senior Engineer at WDP & Associates, P.C.
Aaron Sterns	Projects	(NSF)	2006	unknown
Angela Kingsley (with Roeder)	Thesis	Experimental and Analytical Investigation of CFT Column-Base Connections (ARMY)	2005	Bridge Engineer at HNTB
Adam Christopoulos (with Roeder)	Thesis	Improved Seismic Performance of Buckling Restrained Braced Frames (NSF)	2005	
Jason Evers	Project	(ARMY)	2005	ARMY

Student Name	Level of Supervision	Thesis (funding agency)	Completed (Year)	Current Employer
Shawn Johnson (with Roeder)	Thesis	Improved Seismic Performance of SCBFs (NSF)	2005	Senior Bridge Engineer at T.Y. Lin International
Steve Smith (with Stanton)	Thesis	Models for Performance Evaluation of Older Joints (NSF through PEER center)	2005	Retired
Ingvar Gunnarsson (with Roeder)	Thesis	Numerical Performance Evaluation of Braced Frame Systems (VALLE)	2004	
Meredith Anderson (with Stanton)	Thesis	Analytical Modeling of Existing Reinforced Concrete Joints (NSF through PEER)	2003	Structural Engineer at Read Jones Christoffersen Ltd.
Russell Larson (with Roeder)	Thesis	Strength, Stiffness, and Durability of Cotton Duck Bearing Pads for Bridges (WashDOT)	2003	Magnussun Klemencic Associates
Daniel Alire (with Stanton)	Thesis	Seismic Evaluation of Existing Joints (NSF through PEER Center)	2002	KPFF Consulting Engineers, Seattle
Steve Walker (with Stanton)	Thesis	Seismic Performance of Existing R/C Joints (NSF through PEER center)	2001	Business Unit Director at Power Engineers
Daniel Raynor (with Stanton)	Thesis	Bond Assessment of Hybrid Frame Continuity Reinforcement (Pankow)	2000	American Bridge International
William (Greg) Mosier (with Stanton)	Thesis	Seismic Assessment of Reinforced Concrete Joints	2000	

Other significant student supervision

Student Name	Level of Supervision ("thesis," "project" or "coursework only")	Thesis/Paper Title (if applicable)
Nasser Masrafi	Dissertation	Committee member
Michael Berry	Dissertation	Committee member
Nilanjan Mitra	Dissertation	Committee member
Peter Brown	Thesis	Committee member
Micheal Berry	Thesis	Committee member
Chaitanya Paspuleti	Thesis	Committee member
Myles Parrish	Thesis	Committee member
Adam Theiss	Thesis	Committee member
Hakon Bardson	Thesis	Committee member
Stephen Day	Thesis	Committee member

Amit Mookerje	Thesis	Committee member
Juan Carlos Ramirez	Thesis	Committee member
Rebecca Hix	Thesis	Committee member

RESEARCH ACTIVITIES

Funded Research (only Pending and Awarded Projects Listed)

PIs	Title	Award Total	Your Amount	Funding Agency	Period
Lehman (PI) Lowe	Minimum Reinforcement Requirements of RC and FRC Walls	\$880,500	\$560,00	RMCA Foundation	PENDING
Lehman (PI) Roeder	Connection Details for Pier to Permanently Cased Shaft Piles	\$70,000	\$70,000	FIU ABC UTC	2020 – 2021
Lehman (PI) Lowe	Minimum Design Requirements for Insulated Concrete Forms Wall Systems	\$109,802	\$55,000	RMCA Foundation	2020-2021
Lehman (PI) Roeder	Investigation of Seismic Performance of SCBFs with A1085 HSS Braces	\$175,000	\$100,000	AISC	2020-2022
Roeder (PI) Lehman Berman	Parametric Investigation of Chevron Concentrically Braced Frames	\$35,000	\$10,000	AISC	2019
Lehman (PI) Roeder	CFT Systems for HSR	\$20,000	\$20,000	FHWA/FIU ABC Center	6/2019-6/2020
Lehman (PI) Lowe Ganter	Development of 3D Printed Materials for Rapid Fabrication of Pedestrian and Bicycle Infrastructure to Increase Mobility	\$40,000 + \$30,000 (match)	\$30,000	PacTrans	10/2018 - 10/2019
Lehman (co-PI) Calvi (PI)	Shear Friction Capacity of Concrete Joints with High Strength Reinforcement	\$50,000 + \$30,000 (match)	\$30,000	ACI	9/2018-9/2020
Lehman (PI) Roeder	Seismic Pier-to-CFST Pile Connections for Transportation Structures	\$125,000	~\$60,000	PEER	9/2019-9/2021
Lehman (PI) Roeder	Seismic Pier-to-CFST Pile Connections for High-Speed Rail	\$40,000	\$40,000	FHWA/FIU ABC Center	6/2018-6/2019
Lehman (PI) With Motley, Arduino and Roeder	Vertical Evacuation Structures for Tsunami-prone Regions	\$1,007,491	~\$400,000	NSF	6/2017 - 6/2020
Lehman (co-PI) With Wang (PI) and others.	Acquisition of an advanced nanoindentation system for multidisciplinary research and training	\$450,822	N/A (equipment only)	NSF	2017-2019

PIs	Title	Award Total	Your Amount	Funding Agency	Period
Lehman (with Pujol, Purdue University through separate award)	RAPID/Collaborative Research: Investigation of Reinforced Concrete Buildings Damaged in the Magnitude 6.4 Southern Taiwan Earthquake of February 2016	\$25,858	\$25,858	NSF	April 2016- June 2017
Storti and Ganter (ME), Boydston (Chem), Lehman and Lowes (CEE)	Rapid Deployment of Designer Materials in Devices and Smart & Resilient Infrastructure (SRI) Enabled by Additive Manufacturing”	\$50,000 CoE \$20,000 from CEE	N/A	CoE and CEE	July 2015- July 2016 (with opportu nity for continu ed support 2016- 2017)
Roeder (PI) Lehman (co- PI)	Shear Design Expressions for CFT and RCFT Bridge Components	\$250,000	\$125,000	WSDOT	2013- 2015
Lehman (PI) Roeder (co-PI)	High-Performance Bridge Systems for Lifeline Corridors in the Pacific Northwest	\$100,000 (Subcontract from OSU)	\$50,000	PacTRANS	2012- 2014
Roeder (PI) Berman (co-PI) Lehman (co PI)	NEESR: Innovations for Rehabilitating Vulnerable Braced Frames	\$1,000,00.00 \$325,000 subcontract to UCB	\$225,000	NSF	2012- 2015
Lehman (PI) Roeder (co-PI)	New Connections for CFT for ABD	\$400,000	\$200,000	Caltrans	2012- 2014
Lehman (PI) Roeder (co-PI) Kuder (co-PI)	An Environmentally- Conscious Structural System to Achieve ABC in High Seismic Zones	\$50,000	\$25,000	TransNOW	2009- 2010 (extend ed to 2011)
Roeder (PI) Lehman (co- PI)	Design of Bridge Foundations with Steel Caissons	\$75,000	\$37,500	WashDOT	2010- 2011
Lehman (PI) Roeder (co-PI) Kuder (co-PI)	An Environmentally- Conscious Structural System to Achieve ABC in High Seismic Zones	\$57,000	\$28,500	TransNOW	2009- 2010
Roeder (PI) Lehman (co- PI)	Improved Performance of Pile Connections	\$65,000	\$37,500	PEER	2008- 2009
Berman (PI) Roeder (co-PI) Lehman (co- PI)	Evaluation Procedures for Gusset Plates	\$200,000	\$60,000	WashDOT/FHWA	2009- 2010

PIs	Title	Award Total	Your Amount	Funding Agency	Period
Lehman (PI) Roeder (co-PI)	Construction of Bridge Piers with Improved Seismic Performance	\$350,000	\$175,000	Caltrans	2008-2011
Lehman (PI) with Roeder, Stanton, Lowes, Miller (co-PIs) + 4 SP	MRI: Acquisition of Equipment to Simulate Collapse of Engineered Systems under Extreme Loads	<u>\$679,548 (total)</u> \$559,548 (NSF) \$120,000 (UW)	\$679,548	NSF/UW	2007-2010
Lehman (co-PI) Roeder (PI) With Mahin (UCB), Okazaki (UM), Kasai (e-Defense)	NEES-SG: International Hybrid Simulation of Tomorrow's Braced Frame Systems	\$1,420,000 subcontracts UCB (\$192,570), UMinn (\$340,000),	\$443,715	NSF	2006 – 2010
Lehman (PI) Stanton (co-PI)	Damage Models for Hybrid Connections	\$85,000	\$42,500	NSF through PEER center	2006-2007
Lehman and Roeder UW Rix (GTech) PI	NEES-GC: Seismic Hazard Mitigation of Port Systems	\$270,000 Subcontract from Georgia School of Technology	\$135,000	NSF	2005-2010
Lehman (co-PI) Roeder (PI)	Improved Seismic Performance of Braced Frame Systems	\$30,000	\$15,000	AISC	2006-2007
Lehman (co-PI) Roeder (PI) with Miller (Yr 2&3) MacKenzie (Yr 3)	Vanadium Alloy Steel Tubes for Army Engineering Applications	\$100,000 (yr 4) \$575,00 (yr 3) \$350,000 (yr 2) \$92,000 (yr 1) <u>\$45,000 (case study)</u> \$ 1,160,000 (total)	\$580,000	US ARMY	2001-2007
Lehman (PI) Stanton (co-PI)	Damage Models for Bar Buckling in Beams and Columns	\$85,000 (yr 3) \$85,000 (yr 2) <u>\$90,000 (yr 1)</u> \$260,000 (total)	\$130,000	NSF through PEER center	2004-2007
Lehman (co-PI) Lowes (PI) with Kuchma (UIUC) Zang (UCLA)	NEESR-SG: Behavior, Simulation, and Performance of Structural Wall Systems	\$1,540,000 with \$750,000 subcontracts to UIUC and UCLA	\$395,000	NSF	2004-2008
Lehman (co-PI) Roeder (PI)	Performance-Based Seismic Design of Concentrically Braced Frames	\$296,278	\$148,000	NSF	2003-2006
Lehman (co-PI) Roeder (PI)	REU supplemental to NSF Braced Frame Project	\$15,000	\$7,500	NSF	2004-2006

PIs	Title	Award Total	Your Amount	Funding Agency	Period
Lehman (PI) Stanton (co-PI)	Validation of Simulation and Performance Models for Beam-Column Joints	\$75,000	\$37,500	NSF through PEER center	2003-2004
Lehman (co-PI) Roeder (PI)	Design Recommendations for Cotton Duck Bearing Pads	\$45,000	\$22,500	WashDOT	2002-2003
Lehman (PI) Stanton (co-PI) Lowe (co-PI)	Development of Performance Tools for Reinforced Concrete Beam-Column Joints	\$80,000	\$40,000	NSF through PEER center	2001-2002
Lehman (co-PI) Stanton (PI) Kramer (co-PI)	Assessment and Retrofit of Outrigger Bents	\$140,000	\$70,000	WashDOT	2001-2003
Lehman (co-PI) Roeder (PI)	Cotton-Duck Pad Bridge Bearings	\$93,000	\$46,500	Arkansas Office of Science and Technology	2000-2002
Lehman (PI) Meszaros (co-PI) (UW Bothell)	Decision-Making about Seismic Performance	\$75,000	\$75,000	NSF through PEER center	2000-2002
Lehman (PI)	Non-Ductile RC Building Frames	\$20,000	\$20,000	NSF through PEER center	2000-2001
Lehman (PI) Stanton (co-PI)	Seismic Performance of Existing RC Beam-Column Joints	\$250,000	\$125,000	NSF through PEER center	1999-2002
Lehman (co-PI) Stanton (PI)	Performance of Grouted Reinforcing Bars for Use in a Hybrid Frame System	\$50,000	\$25,000	Pankow Builders	1999-2000
Lehman and Lowe (administered by Moehle UCB)	Anchorage of Headed Reinforcement Subjected to Cyclic Loading	\$40,000	\$20,000	ACI and Mobil Corporation	1998-1999
Lehman (administered by Moehle UCB)	Repair of Severely Damaged Bridge Columns	\$55,000	\$55,000	Caltrans	1997-1999

DOCUMENTATION OF TEACHING EFFECTIVENESS

Courses Taught & Student Evaluations

Course	Title	Quarter	Credit Hrs	Enrollment	Item 1	Item 3	Item 4	Average, Items 1-4
CEE 452	RC Concrete	Autumn 1999	3	11	4.7	5	4.9	4.8
CEE 502	Structural Dynamics	Winter 1999	3	22	3.9	3.9	3.6	3.9
CEE 502	Structural Dynamics	Winter 2000	3	21	3.3	3.3	3.1	3.3
CEE 442	Capstone Design	Winter 2000	3	7	3.8	3.7	3.7	3.8
CEE 452	RC Concrete	Autumn 2000	3	45	3.6	3.8	3.6	3.6
CEE 502	Structural Dynamics	Winter 2001	3	13	4.0	4.1	4.2	4.1
CEE 511	RC Concrete	Autumn 2001	3	19	3.3	3.6	3.3	3.3
CEE 452	RC Concrete	Autumn 2002	3	40	4.0	4.1	4.0	4.0
CEE 502	Structural Dynamic	Winter 2003	3	12	4.0	4.1	3.8	3.9
CEE 452	RC Concrete	Autumn 2003	3	47	4.4	4.7	4.6	4.4
CEE 452	RC Concrete	Autumn 2005	3	65	3.7	3.6	3.6	3.7
CEE 452	RC Concrete	Autumn 2008	3	48	4.0	4.4	4.2	4.2
CEE 442	Capstone Design	Spring 2011	4	42	3.3	2.2	2.3	2.9
CEE 452	Design of RC Structures	Fall 2011	3	59	3.9	3.8	3.5	3.8
CEE 442	Capstone Design	Spring 2012	4	48	4.1	4.0	3.8	4.0
CEE 442	Capstone Design	Spring 2013	4	33	3.8		3.1	3.3
CEE 442	Capstone Design	Spring 2015	5	41	3.8		3.1	3.3
CEE 442	Capstone Design	Spring 2016	5	49	3.8		3.1	3.3
CEE 442	Capstone Design	Spring 2017	5	49	4.1	4.0	3.8	4.0
CEE 442	Capstone Design	Spring 2018	5	33	4.1	4.0	3.8	4.0
CEE 442	Capstone Design	Spring 2018	5	38	4.1	4.0	3.8	4.0
CEE 442	Capstone Design	Spring 2019	5	35	4.1	4.0	3.8	4.0

CEE 442	Capstone Design	Spring 2020	5	36	4.1	4.0	3.8	4.0
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Supervision of independent study (design projects and research)

Hailey Stensil
Taneum Luciana
Becky Gilbertson
Jeffery McKlintock
Ben Swarmer
Travis Corigliano
Rachel Liberty
Stuart Stringer
Matthew Godsey
Matthew Koch
Amanda Jellin
George Gimas
Tim Grant
Russell Larson
Chris Nickerson
Danya Mohr
Violaine Thomassin

SERVICE

Departmental service

2019-present Member, Departmental Affairs Committee
 2019- present Director, Structural Research Laboratory
 2018-2019 Member, Undergraduate Research Committee
 2017- 2018 Member, Departmental Affairs Committee
 2016- present Member, UW Structural Research Laboratory Committee
 2016 – 2019 Lead, ABET
 2016- 2018 Chair, CEE Promotion and Tenure Committee
 2015 Member, CEE Promotion and Tenure Committee
 2013- present Chair, Mentor Committee, Michael Motley
 2010 – 2012 Member, Space Committee
 2010 – 2012 Member, Mentor Committee for Anne Goodchild
 2010 – 2012 Member, Mentor Committee for Michael Dodd
 2006 – 2012 Director, UW Structural Research Laboratory
 2009 Member, CEE Chair Search Committee
 2009 Member, CEE Committee on Mentoring Committees
 2008 - 2009 Member, CEE Strategic Hiring Committee
 2007 – 2008 Member, CEE Search Committee
 2006 – 2012 Director of Structural Research Laboratory
 2001 Open House Coordinator
 2000 Member, Environmental Engineering Chemistry Search Committee

College service

2016-2018 Special Advisor on Technical Facilities, Allen School of CS&E
 2016-2017 Special Advisor on Technical Facilities, CEI

2012-2015 Associate Dean for Infrastructure
1998-1999 Student Affairs Committee

University service

Faculty Council on Faculty Affairs, Member, 9/16/2018 - 9/15/2021.
Panelist WISE conference, March 2014
Panelist Advance Career Workshop, June 2013
Member, UW Seismic Resilience Committee, 2012-present
Member, Construction Review Committee, 2013-2014
Panelist for Career Symposium for Doctoral Students and Post-Docs, Balancing Career and Family, UW Graduate School, November 2005
Panelist for National UW-ADVANCE Summer Leadership Workshop for Department Chairs on Career Choices, Strategies for Facilitating Transitions in Faculty Careers: "Family-Friendly" Policies, July 2005
Panelist for Seminar on Careers, Academia, and Children, Center for Workforce Development, January 2004

Professional society and other service

2020 – present Chair: PEER Institutional Board Representative
2020 AISC TC5 Composite Committee (direct to AISC code), member
2019 PEER Research Review Committee, member
2019 PEER Annual Meeting Organizing committee, member
2019- present ACI 318 H Seismic Committee (direct to ACI 318 code), Member
2019 – present Co-chair for IBC on Seismic Effects on Bridges Workshop, Seattle WA.
2019 – present Level 4 Member of STEER
2018- present ACSE 7 Seismic Committee, Member
2016 – present Member of GEER
2017 - 2019 BSSC IT4 Committee on New Design Approaches for Walls (SK Ghosh Chair)
2018 – present PEER Institutional Board Representative for UW
2017 ACI Committee on Awards, Member
2017 Chair ACI Award Committee: Seiss Award
2016 ACI Award Committee: Seiss Award
2016 - 2017 AISC Awards Committee: Higgins Lecture
2013 Steering Committee for 14th National Earthquake Engineering Conference, emphasis on Bridges
2012-present Member of American Concrete Institute (ACI) Committee 369, Evaluation and Rehabilitation of Existing Structures, Chair of Subcommittee on Concrete Walls.
2011 ATC-94: Recommendations for Seismic Design of Reinforced Concrete Wall Buildings, Based on Studies of the 2010 Chile Earthquake
2011 NEHRP Document on “Best Design Practices for Concrete Walls”
2010 ATC-58 Development of Fragility Functions for Slender Concrete Walls
2010 ATC-58 Development of Fragility Functions for Steel Braced Frames
2006-2008 Member of ASCE-41 Ad Hoc Committee for the Development and Verification of Seismic Evaluation Procedures for Older RC Structures
2002-present Member of American Concrete Institute (ACI) Committee 352, Joint and Connections for Monolithic Construction
2000-2003 Member of Steering Committee for 2003 Structures Congress
2000-present Chair of ACI Subcommittee 341-C, Retrofit of Concrete Bridges
1999-present Member of American Concrete Institute Committee 341, Earthquake-Resistant Concrete Bridges
1999-present Member of American Concrete Institute Committee 374, Performance-Based Seismic Design of Concrete Buildings.

Community service

2013 Career Day Seattle Public Schools

2012 Featured Speaker at Seattle Public Schools Middle School Science Fair

International, national or governmental service

2000 to present: NSF Review panelist

All other service

2007 – 2008 Graduate Student Mentoring Program (Center for Workforce Development)

1999-2000 Faculty and Graduate Student Mentoring Program