

PAOLO M. CALVI

Curriculum Vitae

Department of Civil and Environmental Engineering
University of Washington
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EDUCATIONAL HISTORY

University of Toronto, Toronto, ON, Canada

Ph.D., Civil Engineering

June, 2015

Dissertation Title: A Theory for the Shear Behaviour of Cracks Providing a Basis for the Assessment of Cracked Reinforced Concrete Structures

Primary advisor: Professor Michael P. Collins

University of Pavia, Pavia, Italy

M.Sc., Civil Engineering

July, 2010

Thesis Title: Towards Improved Acceleration Floor Spectra for Seismic Design

Primary advisor: Professor Timothy J. Sullivan

University California San Diego (UCSD), San Diego, CA, USA

Visiting Student, Department of Structural Engineering

March 2008 – June 2008

University of Pavia, Pavia, Italy

B.Eng., Civil Engineering

December 2008

Undergraduate Dissertation Title: Toward a Novel Approach for Damage Identification and Health Monitoring of Bridge Structures

Primary advisor: Professor Paolo Venini

EMPLOYMENT HISTORY

University of Washington

Seattle, WA, USA

Associate Professor, Department of Civil and Environmental Engineering, Sept. 2021 – Present

University of Washington

Seattle, WA, USA

Assistant Professor, Department of Civil and Environmental Engineering, Sept. 2015 – Sept. 2021

University at Buffalo (SUNY)

Buffalo, NY, USA

Visiting Researcher, Department of Civil, Structural and Environmental Engineering, Sept. 2014 – June 2015

European Centre for Training and Research in Earthquake Engineering (EUCENTRE)

Pavia, Italy
Researcher, March 2015 – September 2015

University of Toronto
Toronto, ON, Canada
Graduate Research Assistant, Department of Civil and Environmental Engineering, Sept. 2010 – June 2015

University of Toronto
Toronto, ON, Canada
Teaching Assistant, Department of Civil and Environmental Engineering, Sept. 2010 – December 2014

AWARDS AND HONORS

Finalist: IABSE Project and Technology Awards 2025 (Categories: Small Projects and Small Building Structures. Project: Nuova Torre Piloti, Genoa)

Finalist: Institution of Structural Engineers – Structural Awards 2025 (Project: Nuova Torre Piloti, Genoa)

Winner: The Plan Award 2025, Transport Future Category (Project: Nuova Torre Piloti, Genoa)

Charles Z. Zollman Award, 2021. Precast/Prestressed Concrete Institute. (For PCI Journal paper with most “contribution in advancing the state-of-the-art of precast and prestressed concrete.”)

IABSE 2020 Outstanding Paper Award (Scientific Paper).

Doctoral Completion Award, 2015, University of Toronto (\$3,000 CAD)

Nominee for the 2015 fib Achievement Award for Young Engineers (AAYE).

School of Graduate Studies Conference Grant, 2014, University of Toronto (\$1,000 CAD)

Graduate Fellowship, 2010 – 2014, University of Toronto (\$20,000 CAD)

Teaching Assistantship, 2010 – 2014, University of Toronto (\$20,000 CAD)

Research Assistantship, 2010 – 2015, University of Toronto (\$20,000 CAD)

AFFILIATIONS AND OTHER APPOINTMENTS

University of Pavia/IUSS Pavia
Pavia, Italy
Affiliate Associate Professor, Department of Civil and Environmental Engineering, October 2022 – Present

Polytechnic of Milan
Milano, Italy

Visiting Associate Professor, Department of Civil and Environmental Engineering, Dec. 2023 – Dec. 2024

Scuola Superiore Meridionale
Naples, Italy

Affiliate Associate Professor, Modeling and Engineering Risk and Complexity Department, May 2020 – June 2022

PUBLICATIONS

¹ Graduate students advised or co-advised by Calvi

² Post-doc advised or co-advised by Calvi

IF: journal impact factor reported by journal as of Jan 23, 2026

GS: Google Scholar citations as of Jan 23, 2026

Total GS citations as of Jan 23, 2026: 2267

GS h-index as of Jan 23, 2026: 22

GS i10-index as of Jan 23, 2026: 36

Refereed archival journal publications (Citations and IF not updated)

1. W.D. Galik¹, Y.F. Waktola, P.M. Calvi “Relative Collapse Analysis to Determine Crack Width Limits of Squat RC Shear Walls”, *Bulletin of Earthquake Engineering, Accepted for publication*.
2. W. Galik¹, P.M. Calvi, G. Andreotti (2026). “Multi-Surface Plasticity Model for Reinforced Concrete Cracks Subjected to Earthquake Loading”, *Earthquake Engineering and Structural Dynamics, Accepted for publication*.
3. P.M. Calvi, L. Bogni, A. Bussini, S. Cii, L. Bandini, F. Ripamonti (2026). “Implementation of active mass damping for wind-induced vibration mitigation: The Genoa Control Tower”, *Structures*, Volume 83, January 2026, 110871.
4. P.M. Calvi, A. Rapone¹, G. Gabbianelli, T.C. Becker, H. Sucuoğlu, B. Chalarca, I. Lanese, E. Rizzo-Parisi, G.J. O'Reilly, F. Dacarro (2026). “Dynamic Field Testing of a 15-Year-Old Friction Pendulum Base-Isolated Residential Building”, *Soil Dynamics and Earthquake Engineering*, Volume 200, Part A, January 2026, 109802.
5. B. Farag¹, T. Thonstad, P.M. Calvi (2025). “Evaluating the Shear Strength of Concrete Elements Containing Distributed Macro-Synthetic Fiber and Deformed Bar Reinforcement Engineering Structures”, *Buildings*, 025, 15(19), 3617.
6. J.P. Gaston¹, B. Farag¹, T. Thonstad, P.M. Calvi (2025). “Experimental Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete Panels”, *Fibers*, Issue 10, Volume 13, 2025. Selected as Cover Paper.
7. B. Farag¹, T. Thonstad, P.M. Calvi (2024). “Numerical Modeling of Distributed Macro-Synthetic Fiber and Deformed Bar Reinforcement to Resist Shear”, *Buildings* 2024, 14(10), 3247; <https://doi.org/10.3390/buildings14103247>. (IF: 2.528).
8. P.M. Calvi, E. Che, T. Sweet¹, L. Lowes, J. Berman (2024). “Data Collection Using Terrestrial Laser Scanners from the Shake Table Test of a Full-Scale Reinforced Concrete Building”, *ASCE Journal of Structural Engineering*, Vol. 150, Issue 2. (IF: 2.528).
9. W. Galik¹, P.M. Calvi (2024). “Corrosion and Fatigue Coupling: Assessment of a Prestressed Concrete Cable Stay”, *ASCE Journal of Performance of Constructed Facilities*, Vol. 38, Issue 1. (IF: 2.528). Editor's Choice Collection.

10. W. Galik¹, P.M. Calvi (2023). “Experimental and Numerical Response of Steel-Concrete Composite NPS \rightarrow Beams”, *Engineering Structures*, Vol. 290, 1 September 2023, 116362. (IF: 2.528)
11. G. Rebecchi, P.M. Calvi, A. Bussini, D. Bolognini, L. Grottoli, Stefano Cii, Matteo Rosti, Francesco Ripamonti (2023). “Full-scale shake table tests of a reinforced concrete building equipped with a novel servo-hydraulic active mass damper”, *Journal of Earthquake Engineering*, Vol. 27, Issue 10, 2702-2725. (IF: 2.779)
12. M. Rosti, S. Cii, A. Bussini, P.M. Calvi, F. Ripamonti (2023). “Design and Validation of a Hardware-In-the-Loop Test Bench for Evaluating the Performance of an Active Mass Damper”, *Journal of Vibration and Control*, Vol. 29, Issue 17-18. (IF: 3.095)
13. N. Scattarreggia¹, W. Galik¹, P.M. Calvi, M. Moratti, A. Orgnoni¹, R. Pinho (2022) “Analytical and numerical analysis of the torsional response of the multi-cell deck of a collapsed cable-stayed bridge”, *Engineering Structures*, Vol. 265, 15 August 2022, 114412. (IF: 2.528)
14. J. Stanton, P.M. Calvi (2022). “A Model for Stud Groups Subjected to Shear and Bending”, *Engineering Structures*, 260 (2022) 114182. (IF: 2.528)
15. P.M. Calvi, S. Ahn¹, D. Lehman (2022). “Shear Capacity of Cold Joints with Conventional and High-Strength Reinforcement”, *ACI Structural Journal*, Vol 119, Issue 5. (IF: 1.287)
16. D. Voytko¹, P.M. Calvi, J. Stanton (2022). “Shear Strength of Ultra High-Performance Concrete”, *Engineering Structures*, Volume 255, 113961. (IF: 2.528)
17. A. Albright¹, A. Argentoni, P.M. Calvi (2022). “Experimental Behavior of Interior and Exterior Steel-Concrete Composite NPS \rightarrow Beam-Column Joints”, *Engineering Structures*, Volume 251, Part B, 113589. (IF: 2.528)
18. E. Bruschi¹, V. Quaglini, P.M. Calvi (2022). “A simplified design procedure for seismic upgrade of frame structures equipped with hysteretic dampers”, *Engineering Structures*, Volume 251, Part A, 113504. (IF: 2.528)
19. T.J. Peruchini¹, J. Stanton, P.M. Calvi (2021). “Longitudinal Joints between Deck Bulb Tee Girders Made with Non-proprietary UHPC”, *ASCE Bridge Journal*, Volume 26, Issue 12. (IF: 1.065)
20. E. Bruschi¹, P.M. Calvi, V. Quaglini (2021). “Concentrated plasticity modelling of RC frames in time-history analyses”, *Engineering Structures*, Volume 243, 15 September 2021, 112716. (IF: 2.528, GS: 1 citations)
21. M. Furinghetti, T. Yang¹, P.M. Calvi, A. Pavese (2021). “Experimental Evaluation of Extra-Design Displacement Capacity for Curved Surface Slider Devices”, *Soil Dynamics and Earthquake Engineering*, Volume 146, July 2021, 106752. (IF: 2.723, GS: 4 citations)
22. L. Aragaw¹, P.M. Calvi (2021). “Earthquake-Induced Floor Accelerations in Rocking RC Shear Wall Structures”, *Journal of Earthquake Engineering*, 25(5), pp. 941–969. DOI: 10.1080/13632469.2018.1548393. (IF: 2.754, GS: 5 citations)
23. S. Timsina¹, P.M. Calvi (2021). “Variable Friction Base Isolation Systems: Seismic Performance and Preliminary Design”, *Journal of Earthquake Engineering*, Volume 25, Issue 1, pp. 93–116. DOI: 10.1080/13632469.2018.1504837. (IF: 2.754, GS: 8 citations)
24. T. Yang¹, S. Bergquist¹, P.M. Calvi, R. Wiebe (2021). “Improving Seismic Performance Using Adaptive Variable Friction Systems”, *Engineering Structures*, Vol. 140, January 2021, 106442. (IF: 2.528, GS: 1 citations)
25. T. Yang¹, N.A. Marafi, P.M. Calvi, R. Wiebe, M.O. Eberhard, J.W. Berman (2020). “Accounting for Spectral Shape in a Simplified Method of Analyzing Friction Pendulum

Systems”, *Engineering Structures*, Volume 222, 1 November 2020, 111002. (IF: 2.528, GS: 3 citations)

- 26. O. Davadoorj¹, P.M. Calvi, J. Stanton (2020). “Experimental Response of Headed Stud Connections Subjected to Combined Shear and Bending Actions”, *PCI Journal*, Volume 65, No 5, September-October 2020 Issue. (IF: 1.100)
- 27. O. Davadoorj¹, P.M. Calvi, J. Stanton (2020). “Shear Stress Transfer across Concrete-to-Concrete Interfaces: Experimental Evidence and Available Strength Models”, *PCI Journal*, Volume 64, No 4, July-August 2020. (IF: 1.100, GS: 4 citations). [PCI Charles Z. Zollman Award](#).
- 28. R. Davoudi, G.R. Miller, P.M. Calvi, J.N. Kutz (2020). “Computer Vision-Based Damage and Stress State Estimation for Reinforced Concrete and Steel Fiber-Reinforced Concrete Panels”, *Structural Health Monitoring Journal*, Volume 19, Issue 6. DOI: 10.1177/1475921719892345. (IF: 4.939, GS: 4 citations)
- 29. H. Zhang¹, P.M. Calvi, D. Lehman, K. Kuder, C. Roeder (2020). “Response of Recycled Coarse Aggregate Concrete Subjected to Pure Shear”, *ASCE Journal of Structural Engineering*, DOI 10.1061/(ASCE)ST.1943-541X.0002620. (IF: 2.021)
- 30. T. Yang¹, P.M. Calvi, R. Wiebe (2020). “Numerical Implementation of Variable Friction Sliding Base Isolators and Preliminary Experimental Results”, *Earthquake Spectra*, Volume 36, Issue 2. DOI 10.1177/8755293019891721. (IF: 2.900, GS: 8 citations)
- 31. L.F. Aragaw¹, P.M. Calvi (2020). “Comparing the Performance of Traditional Shear-Wall and Rocking Shear-Wall Structures Designed using the Direct-Displacement Based Design Approach”, *Bulletin of Earthquake Engineering*, Volume 18, pp. 1345–1369. <https://doi.org/10.1007/s10518-019-00740-y> (IF: 2.406, GS: 6 citations)
- 32. M. Moratti, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, C. Casotto, G.M. Calvi, D. Den Hertog, P.M. Calvi, G.T. Proestos (2019). “A Methodology for the Seismic Multilevel Assessment of Unreinforced Masonry Church Inventories in the Groningen Area”, *Bulletin of Earthquake Engineering*, Volume 17, Issue 8, pp. 4625-4650. <https://doi.org/10.1007/s10518-019-00575-7>. (IF: 2.406, GS: 7 citations)
- 33. G.M. Calvi, M. Moratti, G.J. O'Reilly, N. Scattarreggia¹, R. Monteiro, D. Malomo, P.M. Calvi, R. Pinho (2019). “Once upon a Time in Italy: The Tale of the Morandi Bridge”, *Structural Engineering International*, Volume 29, Issue 2, pp. 198-217. (IF: 0.621, GS: 85 citations). [IABSE 2020 Outstanding Paper Award](#).
- 34. D. Perrone, P.M. Calvi, R. Nascimbene, E. Fischer, G. Magliulo (2019). “Seismic performance and damage observation of non-structural elements during the 2016 central Italy earthquakes”, *Bulletin of Earthquake Engineering*, Volume 17, Issue 10, pp. 5655-5677. (IF: 2.406, GS: 69 citations)
- 35. L. Di Sarno, F. da Porto, G. Guerrini, P.M. Calvi, G. Camata, A. Prota (2019). “Seismic performance assessment of bridges during the 2016 Central Italy earthquakes”, *Bulletin of Earthquake Engineering*, Volume 17, Issue 10, pp. 5729-5761. (IF: 2.406, GS: 26 citations)
- 36. S. Mazzoni, G. Castori, C. Galasso, P.M. Calvi, R. Dreyer, E. Fischer, A. Fulco, J. Wilson, A. Penna (2018). “2016-17 Central Italy Earthquake Sequence Seismic Retrofit Policy and Effectiveness”, *Earthquake Spectra*, Volume 34, Issue 4, pp. 1671-1691. (IF: 2.900, GS: 29 citations)
- 37. P.M. Calvi, G.T. Proestos, D.M. Ruggiero (2018). “Towards the Development of Direct Crack-Based Assessment of Structures”, *ACI Structural Journal*, SP 328, pp. 9.1-9.20. (IF: 1.287, GS: 6 citations)

38. P.M. Calvi, E.C. Bentz, M.P. Collins (2018). “Model for Assessment of Cracked Reinforced Concrete Membrane Elements Subjected to Shear and Axial Loads”, *ACI Structural Journal*, Volume 115, No. 2, pp. 501-509. (IF: 1.287, GS: 12 citations)
39. P.M. Calvi, G.M. Calvi (2018). “Historical development of friction-based seismic isolation systems”, *Soil Dynamics and Earthquake Engineering*, Volume 106, pp. 14-30. (IF: 2.723, GS: 59 citations)
40. P.M. Calvi, E.C. Bentz, M.P. Collins (2017). “The Pure Mechanics Crack Model for Cracked Reinforced Concrete Elements Transferring Shear and Axial Stresses”, *ACI Structural Journal*, Volume 114, Issue 2, pp. 545-554. (IF: 1.287, GS: 14 citations)
41. P.M. Calvi, M. Moratti, G.M. Calvi (2016). “Seismic isolation devices based on sliding between surfaces with variable friction coefficient”, *Earthquake Spectra*, Volume 32, Issue 4, pp. 2291-2315. (IF: 2.900, GS: 42 citations)
42. P.M. Calvi, E.C. Bentz, M.P. Collins (2016). “Reversed Cyclic Experiments on Shear Stress Transfer across Cracks in Reinforced Concrete Elements”, *ACI Structural Journal*, Volume 113, Issue 4, pp. 851-859. (IF: 1.287, GS: 15 citations). **Selected as Cover Paper**.
43. P.M. Calvi, D.M. Ruggiero (2016). “Numerical Modelling of Variable Friction Base Isolators”, *Bulletin of Earthquake Engineering*, Volume 14, Issue 2, pp. 549-568. (IF: 2.406, GS: 25 citations)
44. P.M. Calvi, T.J. Sullivan (2014). “Estimating Floor Spectra in Multiple Degree of Freedom Systems”, *Earthquakes and Structures*, Volume 7, Issue 1, pp. 017-38. (IF: 1.573, GS: 86 citations)
45. P.M. Calvi (2014). “Relative Displacement Floor Spectra for Seismic Design of Non-structural Elements”, *Journal of Earthquake Engineering*, Volume 18, Issue 7, pp. 1037-1059. (IF: 2.754, GS: 35 citations)
46. T.J. Sullivan, P.M. Calvi, R. Nascimbene (2013). “Towards Improved Floor Spectra Estimates for Seismic Design”, *Earthquakes and Structures*, Volume 4, Issue 1, pp. 109-132. (IF: 1.573, GS: 123 citations)

Conference proceedings and other non-journal articles (Citations and IF not updated)

Fully refereed publications

1. A. Rapone¹, P.M. Calvi, G. Gabbianelli, T.C. Becker, H. Sucuoğlu, B. Chalarca, I. Lanese, E. Rizzo-Parisi, F. Dacarro and G. O'Reilly “Dynamic In-Situ Testing of a 15-Year-Old Friction-Pendulum Base Isolation System”, 2025 International Workshop in Engineering Research Infrastructures for European Synergies (ERIES-IW2025), 7-9th May 2025, Lisbon, Portugal
2. Aldo Rapone¹, P.M. Calvi, G. Gabbianelli, T.C. Becker, H. Sucuoğlu, B. Chalarca, I. Lanese, E. Rizzo Parisi, F. Dacarro G. O'Reilly “Dynamic Field Testing of a 15-Year-Old Base Isolated Residential Building”, 10th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2025), Rhodes Island, Greece, 15-18 June 2025
3. P.M. Calvi, A. Rapone¹, G. Gabbianelli, T.C. Becker, H. Sucuoglu, B. Chalarka, I. Lanese, E. Rizzo-Parisi, F. Dacarro “Characterizing System-Level Performance of a Base Isolated Building via Dynamic Field Testing”, 19th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, 15 – 19 September, 2025, University of California, Berkeley, California, USA
4. D. Ji, Y. Turkan, P.M. Calvi “Deep Learning-based Surface Defect Detection: Three-class Segmentation”, ASCE International Conference on Computing in Civil Engineering, July 28-31, 2024, Hosted by Carnegie Mellon University Pittsburgh, Pennsylvania, USA

5. F. Menardo, G. Rebecchi, M. Rosti, S. Cii, G. Ducoli, G. D'Agostino, A. Bussini, P.M. Calvi, M. Lenzi "A Novel Active Control System for the Seismic Protection of Structures: Technology and Application", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
6. P.M. Calvi, U. Özçamur, S. Taniser, G.M. Calvi "Performance of Base Isolated Hospital Buildings during the 2023 Turkiye-Syria Earthquakes", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
7. W. Galik¹, P.M. Calvi, G. Andreotti "Discrete Modeling of Reinforced Concrete Crack Interfaces: A Crack-Based Assessment Perspective", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
8. P.M. Calvi, A. Argentoni, S. China "Seismic Design of the New Performance System Steel-Concrete Composite Moment Resisting Frame", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
9. M. Calò, G. Andreotti, P. M. Calvi, R. Monteiro "Exploring the Discrete Element Modeling Approach for Safety Assessment of Prestressed Concrete Bridges", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
10. P.M. Calvi, E. Che, L. Lowes, J. Berman "Terrestrial Laser Scanner Monitoring of a Full-Scale Reinforced Concrete Building Tested via Shake-Table", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
11. W. Galik¹, P.M. Calvi "Numerical modeling of the response of the beam-column joint subassembly within a novel moment resisting frame system", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.
12. G. Rebecchi, F. Menardo, M. Rosti, A. Bussini, P.M. Calvi "Full-scale shake table tests of a R.C. building equipped with an active mass damper: experimental results and numerical simulations", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.
13. M. Casto, D. Perrone, P.M. Calvi, R. Nascmibene, M. A. Aiello "Toward a BIM-based procedure for the evaluation of a risk prioritization class of bridge structures", EUROSTRUCT 2023, 2nd Conference of the European Association on Quality Control of Bridges and Structures, Vienna, Austria, 27-29 September 2023.
14. P.M. Calvi, G. Rebecchi, A. Bussini, D. Bolognini, L. Grottoli, Stefano Cii, Matteo Rosti, Francesco Ripamonti "Full-scale shake table tests of a reinforced concrete structure equipped with a novel active mass damper", 3rd European Conference on Earthquake Engineering and Seismology, Bucharest, Romania, September 4th - September 9th, 2022.
15. E. Bruschi¹, V. Quaglini, P.M. Calvi, "A simplified design procedure for the seismic rehabilitation of RC framed structures with hysteretic damped braces", 3rd European Conference on Earthquake Engineering and Seismology, Bucharest, Romania, September 4th - September 9th, 2022.
16. D. Ji, Y. Turkan, P.M. Calvi "Toward Automation in Crack Detection and Measurements: Benchmarking of CNN-based Algorithms", 39th International Symposium on Automation and Robotics in Construction (ISARC 2022), Bogota, Colombia, 13-15 July, 2022.
17. E. Bruschi¹, V. Quaglini, P.M. Calvi, "A simplified design procedure to improve the seismic performance of RC framed buildings with hysteretic damped braces", 5th edition of the International Symposium "New Metropolitan Perspectives", May 25th-May 27th, 2022, Università Mediterranea of Reggio Calabria, Italy. (GS: 0 citations)
18. E. Bruschi¹, V. Quaglini, P.M. Calvi, "Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses", Proc. of the 2nd fib Symposium on Concrete and Concrete Structures, Nov 18th-19th, 2021, Sapienza University, Rome, Italy. (GS: 0 citations)

19. A. Albright¹, A. Argentoni, P.M. Calvi, "Experimental investigation of interior and exterior steel-concrete composite NPS® beam-column joints", 9th International Conference on Composite Construction in Steel and Concrete, Stromberg, Germany, July 26-30,2021. (GS: 0 citations)
20. N. Scattarreggia¹, A. Orgnoni¹, D. Malomo, P.M. Calvi, M. Moratti, G.M. Calvi, R. Pinho, "Computational forensic analysis of bridge collapses", SEI-ASCE Structures Congress 2021, Seattle, Washington, USA, March 10th to 13th 2021. (GS: 0 citations)
21. T.Z. Yeow, K. Kusunoki, I. Nakamura, Y. Hibino, T. Ohkubo, T. Seike, S. Yagi, T. Mukai, P. M. Calvi, M. Moustafa, S. Fukai, "The 2019 Tokyo Metropolitan Resilience Project E-Defense Test of a 3-Story Disaster Management Center", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 1 citations)
22. T. Yang¹, N. Marafi, P.M. Calvi, R. Wiebe, M.O. Eberhard, J.W. Berman, "Evaluation of Displacement-Based Design Methods for Structures with Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 0 citations)
23. P.M. Calvi, T. Yang¹, R. Wiebe, "Development of Variable Friction Pendulum Systems", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 0 citations)
24. M. Furinghetti, T. Yang¹, P.M. Calvi, A. Pavese, "Dynamic Response of Curved Surface Slider Devices under Severe Input Motions", 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 13th to 18th 2020. (GS: 1 citations)
25. H. Zhang¹, K. Kuder, D. Lehman, P.M. Calvi, C. Roeder, "Effect of Recycled Concrete Aggregate on the Shear Behavior of Reinforced Concrete Panels", Fifth International Conference on Sustainable Construction Materials and Technologies (SCMT5), London, UK, 14-17 July 2019. (GS: 0 citations)
26. T. Yang¹, N. Marafi, P.M. Calvi, R. Wiebe, "Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019. (GS: 1 citations)
27. S.A. Bergquist¹, P.M. Calvi, R. Wiebe, "Introducing Adaptive Variable Friction Base Isolation Systems", 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019. (GS: 4 citations)
28. M. Moratti, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, G.M. Calvi, D. Den Hertog, P.M. Calvi, G.T. Proestos, "A Multilevel Methodology for the Seismic Assessment of Unreinforced Masonry Church Inventories in the Groningen Area", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)
29. M. Moratti, F. Gaia, S. Martini, A. Tomasi, C. Tsioli, G. Grecchi, S. Ozcebe, G.M. Calvi, D. Den Hertog, P.M. Calvi, G.T. Proestos, "Seismic Assessment of Unreinforced Masonry Terraced and Semi-Detached Houses in the Groningen Area, A Knowledge Based Support System", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)
30. T.Y. Yang¹, P.M. Calvi, R. Wiebe, "Numerical Implementation and Investigation of Variable Friction Sliding Base Isolators", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018. (GS: 1 citations)
31. L. Aragaw¹, P.M. Calvi, "Floor Spectra in Hybrid Base-Rocking Wall Buildings", 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018. (GS: 0 citations)
32. S. Timsina¹, P.M. Calvi, "Damping properties of variable friction base isolation systems", 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 5 citations)

33. A. Christman¹, P.M. Calvi, “Seismic Risk Assessment of Reinforced Concrete Bridges in Washington State Using a Performance Based Adaptive Methodology”, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018. (GS: 0 citations)
34. P.M. Calvi, G.T. Proestos, D.M. Ruggiero, “Towards the Development of Direct Crack-Based Assessment of Structures”, *ACI Convention*, March 25-29 2018, Salt Lake City, UT. (GS: 1 citations)
35. G.M. Calvi, P.M. Calvi, M. Moratti (2017). “Seismic isolation of buildings using devices based on sliding between surfaces with variable friction coefficient”, *Innovative Infrastructure Solutions*, Volume 2, Issue 1, pp. 39. (GS: 3 citations)
36. P.M. Calvi, S. Timsina¹, “Numerical Study of the seismic behavior of variable friction base isolation system”, 39th IABSE Symposium – Engineering the Future, September 21-23 2017, Vancouver, Canada. (GS: 7 citations)
37. P.M. Calvi, D.M. Ruggiero “Earthquake-Induced Floor Accelerations in Base Isolated Structures”, 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago Chile, January 9th to 13th 2017. (GS: 4 citations)
38. P.M. Calvi, E.C. Bentz, M.P. Collins “Shear Stress Transfer across Major Cracks in Reinforced Concrete”, Proceedings of the 10th fib International PhD Symposium in Civil Engineering July 21 to 23, 2014, Université Laval, Québec, Canada. (GS: 0 citations)
39. P.M. Calvi, T.J. Sullivan, “Improved estimation of floor spectra in RC wall buildings”, Proceedings of the 10th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014. (GS: 3 citations)

Refereed by abstract only

1. D. Ji, Y. Turkan, P.M. Calvi “AI-Enabled Drone Image Processing for Rapid Bridge Inspection and Management”, EMI 2022, May 31-June 3 2022, Baltimore, Maryland, US. (GS: 0 citations)
2. E. Bruschi¹, V. Quaglini, P.M. Calvi, “Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses”, 2nd fib Symposium on Concrete and Concrete Structures, 18-19 November 2021 in Rome, Italy. (GS: 0 citations)
3. T.J. Peruchini¹, J. Stanton, P.M. Calvi, “Longitudinal Deck Joints between Concrete Girders Made Using UHPC”, The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA - October 1st to 4th, 2019. (GS: 0 citations)
4. A. Orgnoni¹, N. Scattarreggia¹, D. Malomo, P.M. Calvi, M. Moratti, G.M. Calvi, R. Pinho “Seismic Assessment of Concrete Balanced-System Bridges”, The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA - October 1st to 4th, 2019. (GS: 0 citations)
5. T. Yang¹, U. Ozcamur, P.M. Calvi, R. Wiebe, E. Bruschi¹, V. Quaglini, H. Sucuoglu, A. Pavese, “Experimental Investigation of the Behavior of Variable Friction Base Isolation Systems”, Proceedings of the 7th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete island, Greece, 24-26 June, 2019. (GS: 3 citations)
6. H. Aghabegi, G. Proestos, P.M. Calvi “Seismic Assessment of a Full-Scale Rocking Shear Wall Structure”, Proceedings of the 5th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete Island, Greece, 25 - 27 May 2015. (GS: 0 citations)
7. T.J. Sullivan, P.M. Calvi, D.P. Welch, “Estimating roof-level acceleration spectra for single storey buildings”, Proceedings of the 4th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos island, Greece, 2013. (GS: 3 citations)

8. P.M. Calvi, M. Pingaro, P. Venini, “Truly-mixed finite-elements for the analysis of viscoelastic devices”, Proceedings of the 20th AIMETA Conference, Bologna, Italy, 2011. (GS: 0 citations)
9. P.M. Calvi, P. Venini, “Toward a novel approach for damage identification and health monitoring of bridge structures”, Proceedings of the 19th AIMETA Conference, Ancona, Italy, 2009. (GS: 0 citations)

Complete books written

None

Parts of books (chapters in edited books)

1. G.M. Calvi, M. Moratti, N. Scattarreggia¹, V. Özsaraç, P.M. Calvi, R. Pinho, “Numerical investigations on the collapse of the Morandi Bridge”, Springer Tracts on Transportation and Traffic, 2021, 17, pp. 3–18.
2. E. Bruschi¹, V. Quaglini, P.M. Calvi, “A Simplified Design Procedure to Improve the Seismic Performance of RC Framed Buildings with Hysteretic Damped Braces”, in New Metropolitan Perspectives, January 2022.

Books edited

None

Journal issues edited

None

Patents submitted and/or awarded

None

Papers submitted (for refereed archival journal publication)

1. A. Rapone¹, G. Gabbianelli, P.M. Calvi “Seismic Response of a Real Three-Story Residential Timber Structure Subjected to Dynamic Field Testing”, *Soil Dynamics and Soil Dynamics and Earthquake Engineering*
2. W. Galik¹, P.M. Calvi “Validation of a Material Model for Reinforced Concrete Interfaces, *Engineering Structures*

Papers in preparation (for refereed archival journal publication)

1. W. Galik¹, P.M. Calvi “Seismic Performance of Steel-Concrete composite “NPS” Beam-Column Joints”, *Engineering Structures* (2026)
2. A. Rapone¹, M. Furinghetti, F. Dacarro, P.M. Calvi “Assessing the Long-Term Response of Friction Pendulum Bearings through Full-Scale Component Testing” *Soil Dynamics and Earthquake Engineering*.
3. S. Turner¹, J. Stanton, P.M. Calvi “Experimental response of prestressed concrete hollow piles subject to shear and bending” *PCI Journal*
4. T. Tardieu¹, S. Turner¹, J. Stanton, P.M. Calvi “Reversed Cyclic Experimental Behavior of Hollow Core Prestressed Concrete Bridge Column-Piles” *TBD*
5. D. Ji, Y. Turkan, P.M. Calvi, “Toward Automated Crack Detection and Measurements for Rapid Structural Inspections”, *Structural Health Monitoring*

Abstracts, letters, non-refereed papers, technical reports

Non-refereed papers

1. A. Albright¹, A. Argentoni, G. Faga, P.M. Calvi (2022). “Experimental Behavior of Interior and Exterior Steel-Concrete Composite NPS[→] Beam-Column Joints”, *Progettazione Sismica*
2. P.M. Calvi, G. Faga, G.M. Calvi (2018). “Sviluppo storico dei sistemi di isolamento sismico ad attrito”, *Progettazione Sismica*, Volume 10, Issue 2 (In Italian). (GS: 0 citations)
3. P.M. Calvi, M. Moratti, A. Filiatrault (2015). “Role and importance of non-structural elements in the seismic vulnerability of school buildings”, *Progettazione Sismica*, Volume 6, Issue 3 (In Italian). (GS: 4 citations)
4. T.J. Sullivan, P.M. Calvi, D. Bolognini (2015). “Evaluation of floor spectra for the seismic design of non-structural elements”, *Progettazione Sismica*, Volume 6, Issue 3 (In Italian). (GS: 1 citations)
5. P.M. Calvi, M. Moratti, G.M. Calvi (2015). “Seismic isolation devices based on variable friction sliding materials”, *Progettazione Sismica*, Volume 6, Issue 1 (In Italian). (GS: 0 citations)

Technical reports

1. P.M. Calvi, “Relazione di calcolo strutturale Stazione Standard”, Technical Report (in Italian) Submitted to Prodeval srl, Italy, April 10, 2025.
2. P.M. Calvi, “Relazione di calcolo strutturale Stazione Scrubber”, Technical Report (in Italian) Submitted to Prodeval srl, Italy, April 10, 2025.
3. P.M. Calvi, “Nuova Torre dei Piloti di Genova: Progettazione Preliminare di un Sistema Smorzante a Controllo Attivo per Mitigare gli Effetti Dinamici del Vento”, Technical Report (in Italian) Submitted to the Port of Genoa, Italy, April 18, 2024.
4. P.M. Calvi, “Nuova Torre dei Piloti di Genova: Analisi Preliminare degli Effetti Dinamici del Vento”, Technical Report (in Italian) Submitted to the Port of Genoa, Italy, February 5, 2024.
5. T. Thonstad, P.M. Calvi, J.P. Gaston¹, “Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete”, Technical Report submitted to Concrete Research Council of ACI, December 2023.
6. P.M. Calvi, “Seismic Response of Exterior Steel-Concrete Composite NPS Beam-Column Joints”, Technical Report submitted to TECNOSTRUTTURE, August 2023.
7. P.M. Calvi, L. Lowes, “RAPID/Collaborative Research: Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures”, Final Report, National Science Foundation (NSF), Award Number: 2000478, March 2023.
8. Y. Turkan, P.M. Calvi, D. Ji, “Lidar, Drones and Brim for Rapid Bridge Inspection and Management”, Technical Report, Pacific Northwest Transportation Consortium (PacTrans), April 2023.
9. D. Voytko¹, P.M. Calvi, J. Stanton, “Development of Non-Proprietary UHPC Mix – Evaluation of the Shear Strength of UHPC”, Report No. ABC-UTC-2016-C2-UW01 - Final, Accelerated Bridge Construction University Transportation Center, January 2024.
10. T. Thonstad, P.M. Calvi, J.P. Gaston¹, “Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete”, Technical Report submitted to Concrete Research Council of ACI, December 2022.
11. W. Galik¹, P.M. Calvi, “Shear behavior of steel-concrete composite “NPS Basic beams”, Technical Report submitted to TECNOSTRUTTURE, March 2022.
12. W. Galik¹, P.M. Calvi, “Seismic Performance of Steel-Concrete composite NPS Beam-Column Joints”, Technical Report submitted to TECNOSTRUTTURE, April 2022.
13. P.M. Calvi, A. Albright¹, “Experimental behavior of NPS beam-column joints”, Technical Report submitted to TECNOSTRUTTURE, December 2020.

14. P.M. Calvi, D. Lehman, S. Ahn¹, "Shear Friction Capacity of Concrete Joints with High Strength Reinforcement", Technical Report submitted to Concrete Research Council of ACI, November 2020.
15. J. Stanton, P.M. Calvi, T. Tardieu¹, S. Turner¹, "Use of Hollow Prestressed Concrete Pile-Columns for Bridges in Seismic Regions" Washington (State). Dept. of Transportation. Office of Research and Library Services, 2020.
16. Al. et P.M. Calvi, "D9.1 - Technical report on SERA Transnational Access activities TA1-TA10 M24", Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe, Work Package WP8-WP17, April 30, 2020.
17. P.M. Calvi, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Explanatory Notes on Design Recommendations", Technical Report submitted to TECNOSTRUTTURE, February 2020.
18. P.M. Calvi, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints. Beam-Column Joints and Plastic Hinge Regions: Proposed Experimental Program", Technical Report submitted to TECNOSTRUTTURE, January 2020.
19. P.M. Calvi, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Special Considerations for Beam-Column Joints and Plastic Hinge regions", Technical Report submitted to TECNOSTRUTTURE, November 2019.
20. P.M. Calvi, "Earthquake-resistant construction system composed of steel-concrete composite beams, columns and beam-to-column joints: Design Recommendations", Technical Report submitted to TECNOSTRUTTURE, October 2019.
21. T.J. Peruchini¹, J. Stanton, P.M. Calvi, "Investigation of Ultra High-Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders", Washington (State). Dept. of Transportation. Office of Research and Library Services, 2017. (GS: 2 citations)
22. P.M. Calvi, "A theory for the shear behaviour of cracks providing a basis for the assessment of cracked reinforced concrete structures", PhD dissertation, University of Toronto, Canada, June 2015. (GS: 8 citations)
23. P.M. Calvi, M. Moratti, A. Filiatrault, "Analisi della Risposta di Elementi Non Strutturali durante Terremoti Passati", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, June, 2015.
24. P.M. Calvi, A. Filiatrault, "Assessment of Cracked Reinforced Concrete Bridge Structures", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, December 31, 2014.
25. P.M. Calvi, A. Filiatrault, "Vulnerabilità degli Elementi non Strutturali in Edifici Scolastici", technical report (in Italian) submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, December 1, 2014.
26. P.M. Calvi, A. Filiatrault, "Role and Importance of Non-Structural Elements in the Seismic Vulnerability of School Buildings in Past Earthquakes", technical report submitted to the European Centre for Training and Research in Earthquake Engineering (Eucentre), Pavia, Italy, November 1, 2014.

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

1. Calvi P.M. et al. (2025). Long-Term Performance Assessment of Base Isolated Buildings through Field Testing (ERIES-PASFIT) (<https://experiments.builtenvdata.eu/datasets/86/>)
2. Calvi, P. Lowes, L. Moustafa, M. Berman, J. Sweet, T. Zdebski, J. Lyda, A. Che, E. (2023) "Shake Table Damage Detection with Terrestrial Laser Scanners", in *RAPID: Data*

collection at 2019 E-Defense RC Moment Frame Testing. DesignSafe-CI. [https://doi.org/10.17603/ds2-qv7d-a845 v1](https://doi.org/10.17603/ds2-qv7d-a845).

3. H. Sucuoğlu, I. Lanese, A. Pavese, P.M. Calvi, C. Galasso, U. Ozcamur, V. Quaglini (2022) "Dynamic testing of variable friction seismic isolation devices and isolated systems", "Proceedings of the Transnational Access Framework" - Seismology and Earthquake Engineering Research Infrastructure Alliance for Europe (SERA Project) - edited by A. Pavese, I. Lanese, E. Rizzo Parisi and G. Fagà. Pavia, Italy. Eucentre, 2022. ISBN 9788885701144. DOI: 10.7414/SERA-TA.EUCENTRE.Project3

MISCELLANEOUS

Outside Professional Work for Compensation (1460s)

Sep. 2024 – June 2025, Form 1460: European Centre for Training and Research in Earthquake Engineering (Eucentre) (Italy)

Dec. 2023 – June 2024, Form 1460: Politecnico di Milano (Italy)

OTHER SCHOLARLY ACTIVITY

Invited lectures and seminars

1. Course "Reinforced Concrete Structure" part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2024.
2. XIII CONVEGNO INTERNAZIONALE CIAS. "Long-Term Performance of Friction-Based Seismic Isolation Systems e", Marrakech, Morocco, April 21-27, 2024.
3. Course "Reinforced Concrete Structure" part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2022.
4. ABC-UTC Webinar, *Behavior and Strength of UHPC in Shear*, July 30th, 2021.
5. NHERI-NIED/E-Defense 4th Collaboration Meeting, Remote, *Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures*, December 2020.
6. Joint NHERI@UC San Diego - RAPID Researcher Workshop 2020, *Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures*, December 2020.
7. 2019 NHERI-E-Defense Meeting, Miki, Japan, *Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures*, December 2019.
8. SEAW Seattle Chapter and Southwest Chapter Joint Meeting, *Response to the August 24, 2016 Central Italy Earthquake*, April 2017.
9. University of Liege, Belgium, *Advanced Design of Reinforced Concrete Structures*, Short Course, December 2016.
10. ARUP, Toronto, Canada, *Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions*, April 2015.
11. University of Nevada, Reno, Department of Civil and Environmental Engineering, *Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions*, April 2015.
12. University of Washington, Seattle, *Department of Civil and Environmental Engineering, Performance Assessment of Reinforced Concrete Structures Subject to Complex Loading Conditions*, March 2015.
13. University at Buffalo, The State University of New York, Department of Civil, Structural and Environmental Engineering Performance, *Towards Floor Response Spectra Estimates for Seismic Design*, February 2013.

14. University of Toronto, Department of Civil and Environmental Engineering, *Response of Heavily Cracked RC Membrane Elements Subjected to Cyclic and Reverse Cyclic Loads*, October 2012.
15. Queen's University, Department of Civil and Environmental Engineering, *An Experimental Campaign: Preliminary Results on Aggregate Interlock Behaviour*, October 2011.

Presentations given at conferences (presenter in bold)

1. **A. Rapone¹, P.M. Calvi**, G. Gabbianelli, T.C. Becker, H. Sucuoğlu, B. Chalarca, I. Lanese, E. Rizzo-Parisi, F. Dacarro and G. O'Reilly "Dynamic In-Situ Testing of a 15-Year-Old Friction-Pendulum Base Isolation System", 2025 International Workshop in Engineering Research Infrastructures for European Synergies (ERIES-IW2025), 7-9th May 2025, Lisbon, Portugal
2. **Aldo Rapone¹, P.M. Calvi**, G. Gabbianelli, T.C. Becker, H. Sucuoğlu, B. Chalarca, I. Lanese, E. Rizzo Parisi, F. Dacarro G. O'Reilly "Dynamic Field Testing of a 15-Year-Old Base Isolated Residential Building", 10th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (COMPDYN 2025), Rhodes Island, Greece, 15-18 June 2025
3. **P.M. Calvi**, A. Rapone¹, G. Gabbianelli, T.C. Becker, H. Sucuoglu, B. Chalarka, I. Lanese, E. Rizzo-Parisi, F. Dacarro "Characterizing System-Level Performance of a Base Isolated Building via Dynamic Field Testing", 19th World Conference on Seismic Isolation, Energy Dissipation and Active Vibration Control of Structures, 15 – 19 September, 2025, University of California, Berkeley, California, USA
4. D. Ji, **Y. Turkan, P.M. Calvi** "Deep Learning-based Surface Defect Detection: Three-class Segmentation", ASCE International Conference on Computing in Civil Engineering, July 28-31, 2024, Hosted by Carnegie Mellon University Pittsburgh, Pennsylvania, USA
5. F. Menardo, **G. Rebecchi**, M. Rosti, S. Cii, G. Ducoli, G. D'Agostino, A. Bussini, **P.M. Calvi**, M. Lenzi "A Novel Active Control System for the Seismic Protection of Structures: Technology and Application", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
6. **P.M. Calvi**, **U. Özçamur**, S. Taniser, G.M. Calvi "Performance of Base Isolated Hospital Buildings during the 2023 Turkiye-Syria Earthquakes", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
7. **W. Galik¹, P.M. Calvi**, G. Andreotti "Discrete Modeling of Reinforced Concrete Crack Interfaces: A Crack-Based Assessment Perspective", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
8. **P.M. Calvi**, **A. Argenton**, S. China "Seismic Design of the New Performance System Steel-Concrete Composite Moment Resisting Frame", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
9. **M. Calò**, G. Andreotti, **P. M. Calvi**, R. Monteiro "Exploring the Discrete Element Modeling Approach for Safety Assessment of Prestressed Concrete Bridges", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
10. **P.M. Calvi**, E. Che, **L. Lowes**, J. Berman "Terrestrial Laser Scanner Monitoring of a Full-Scale Reinforced Concrete Building Tested via Shake-Table", 18th World Conference on Earthquake Engineering, WCEE 2024, Milan, Italy, June 30 – July 5, 2024.
11. **W. Galik¹, P.M. Calvi** "Numerical modeling of the response of the beam-column joint subassembly within a novel moment resisting frame system", 9th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Athens, Greece, 12-14 June 2023.

12. **P.M. Calvi** “Long-Term Performance of Friction-Based Seismic Isolation Systems”, Centro Internazionale di Aggiornamento Sperimentale-Scientifico (CIAS), Cadi Ayyad University, Marrakech, Morocco, April 21-27, 2024.
13. **T. Thonstad, P.M. Calvi**, J.P. Gaston¹ “Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces.” Accelerated Bridge Construction University Transportation Center 2023 Research Day 1, Miami, FL, May 2023.
14. **T. Thonstad, P.M. Calvi**, “Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces.” Accelerated Bridge Construction University Transportation Center 2022 Research Day 2 Miami, FL, November 2022.
15. **J.P. Gaston¹**, T. Thonstad, **P.M. Calvi** “Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete”, ACI Concrete Convention, October 23-27 2022, Dallas, TX, US
16. D. Ji, **Y. Turkan, P.M. Calvi** “Toward Automation in Crack Detection and Measurements: Benchmarking of CNN-based Algorithms”, 39th International Symposium on Automation and Robotics in Construction (ISARC 2022), Bogota, Colombia, 13-15 July, 2022.
17. D. Ji, **Y. Turkan, P.M. Calvi** “AI-Enabled Drone Image Processing for Rapid Bridge Inspection and Management”, EMI 2022, May 31-June 3 2022, Baltimore, Maryland, US.
18. **E. Bruschi¹**, V. Quaglini, **P.M. Calvi** (2022). “A simplified design procedure to improve the seismic performance of RC framed buildings with hysteretic damped braces”, 5th edition of the International Symposium “New Metropolitan Perspectives”, May 25th-May 27th, 2022, Università Mediterranea of Reggio Calabria, Italy.
19. **E. Bruschi¹**, V. Quaglini, **P.M. Calvi**, “Numerical assessment of concentrated plasticity models of ductile RC frames in non-linear dynamic analyses”, Proc. of the 2nd fib Symposium on Concrete and Concrete Structures, Nov 18th-19th, 2021, Sapienza University, Rome, Italy.
20. A. Albright¹, A. Argentoni, **P.M. Calvi**, “Experimental investigation of interior and exterior steel-concrete composite NPS \rightarrow beam-column joints”, 9th International Conference on Composite Construction in Steel and Concrete, Stromberg, Germany, July 26-30,2021.
21. **P.M. Calvi**, T. Sweet¹, L.N. Lowes, J.W. Berman “Lidar Evaluation of Damage to a Reinforced Concrete Moment Frame Structure”, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
22. **T.Z. Yeow**, K. Kusunoki, I. Nakamura, Y. Hibino, T. Ohkubo, T. Seike, S. Yagi, T. Mukai, **P. M. Calvi**, M. Moustafa, S. Fukai, “The 2019 Tokyo Metropolitan Resilience Project E-Defense Test of a 3-Story Disaster Management Center”, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
23. **T. Yang¹**, N. Marafi, **P.M. Calvi**, R. Wiebe, M.O. Eberhard, J.W. Berman, “Evaluation of Displacement-Based Design Methods for Structures with Friction Pendulum Systems”, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
24. **P.M. Calvi, T. Yang¹**, R. Wiebe, “Development of Variable Friction Pendulum Systems”, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
25. **M. Furinghetti**, T. Yang¹, **P.M. Calvi**, A. Pavese, “Dynamic Response of Curved Surface Slider Devices under Severe Input Motions”, 17th World Conference on Earthquake Engineering, 17WCEE, Sendai, Japan - September 27th to October 2nd 2021.
26. N. Scattarreggia¹, A. Orgnoni¹, **D. Malomo, P.M. Calvi**, M. Moratti, G.M. Calvi, R. Pinho, “Computational forensic analysis of bridge collapses”, SEI-ASCE Structures Congress 2021, Seattle, Washington, USA, March 10th to 13th 2021.
27. S. Ahn¹, **P.M. Calvi**, D. Lehman, “Shear Friction Capacity of Concrete Cold Joints”, *ACI Convention*, October 20-24 2019, Cincinnati, OH, USA.

28. T.J. Peruchini¹, J. Stanton, **P.M. Calvi**, “Longitudinal Deck Joints between Concrete Girders Made Using UHPC”, The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA - October 1st to 4th, 2019.
29. A. Orgnoni¹, N. Scattarreggia¹, **D. Malomo**, **P.M. Calvi**, M. Moratti, G.M. Calvi, R. Pinhom “Seismic Assessment of Concrete Balanced-System Bridges”, The Third International Bridge Seismic Workshop, 3rd IBSW Seattle, Washington, USA - October 1st to 4th, 2019.
30. H. Zhang¹, **K. Kuder**, D. Lehman, **P.M. Calvi**, C. Roeder, “Effect of Recycled Concrete Aggregate on the Shear Behavior of Reinforced Concrete Panels”, Fifth International Conference on Sustainable Construction Materials and Technologies (SCMT5), London, UK, 14-17 July 2019.
31. T. Yang¹, U. Ozcamur, **P.M. Calvi**, R. Wiebe, **E. Bruschi**¹, V. Quaglini, H. Sucuoglu, A. Pavese, “Experimental Investigation of the Behavior of Variable Friction Base Isolation Systems”, Proceedings of the 7th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete island, Greece, 24-26 June, 2019.
32. **T. Yang**¹, N. Marafi, **P.M. Calvi**, R. Wiebe, “Impact of Simulated M9 Cascadia Subduction Zone Motions on Base Isolated Structures”, 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019.
33. **S.A. Bergquist**¹, **P.M. Calvi**, R. Wiebe, “Introducing Adaptive Variable Friction Base Isolation Systems”, 12th Canadian Conference on Earthquake Engineering, Quebec City, Canada, June 17-20, 2019.
34. S. Ahn¹, **P.M. Calvi**, D. Lehman, “Shear Friction Capacity of Concrete Joints with High Strength Reinforcement”, *ACI Convention*, October 14-18 2018, Las Vegas, NV, USA.
35. **M. Moratti**, F. Gaia, S. Martini, C. Tsioli, G. Grecchi, G.M. Calvi, D. Den Hertog, **P.M. Calvi**, G.T. Proestos, “A Multilevel Methodology for the Seismic Assessment of Unreinforced Masonry Church Inventories in the Groningen Area”, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
36. **M. Moratti**, F. Gaia, S. Martini, A. Tomasi, C. Tsioli, G. Grecchi, S. Ozcebe, G.M. Calvi, D. Den Hertog, **P.M. Calvi**, G.T. Proestos, “Seismic Assessment of Unreinforced Masonry Terraced and Semi-Detached Houses in the Groningen Area, A Knowledge Based Support System”, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
37. **T.Y. Yang**¹, **P.M. Calvi**, R. Wiebe, “Numerical Implementation and Investigation of Variable Friction Sliding Base Isolators”, 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018.
38. L. Aragaw¹, **P.M. Calvi**, “Floor Spectra in Hybrid Base-Rocking Wall Buildings”, 11th U.S. National Conference on Earthquake Engineering, Los Angeles, California, 2018.
39. S. Timsina¹, **P.M. Calvi**, “Damping properties of variable friction base isolation systems”, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
40. A. Christman¹, **P.M. Calvi**, “Seismic Risk Assessment of Reinforced Concrete Bridges in Washington State Using a Performance Based Adaptive Methodology”, 16th European Conference on Earthquake Engineering, Thessaloniki, Greece, 2018.
41. **P.M. Calvi**, G.T. Proestos, D.M. Ruggiero, “Towards the Development of Direct Crack-Based Assessment of Structures”, *ACI Convention*, March 25-29 2018, Salt Lake City, UT, USA. **G.M. Calvi**, **P.M. Calvi**, M. Moratti (2017). “Seismic isolation of buildings using devices based on sliding between surfaces with variable friction coefficient”, *Innovative Infrastructure Solutions*, Volume 2, Issue 1, pp. 39.
42. **P.M. Calvi**, **S. Timsina**¹, “Numerical Study of the seismic behavior of variable friction base isolation system”, 39th IABSE Symposium – Engineering the Future, September 21-23 2017, Vancouver, Canada.

43. **P.M. Calvi**, D.M. Ruggiero “Earthquake-Induced Floor Accelerations in Base Isolated Structures”, 16th World Conference on Earthquake Engineering, 16WCEE 2017, Santiago Chile, January 9th to 13th 2017.
44. H. Aghabeigi, **G. Proestos**, **P.M. Calvi** “Seismic Assessment of a Full Scale Rocking Shear Wall Structure”, Proceedings of the 5th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Crete Island, Greece, 25 - 27 May 2015.
45. **P.M. Calvi**, E.C. Bentz, M.P. Collins “Shear Stress Transfer across Major Cracks in Reinforced Concrete”, Proceedings of the 10th fib International PhD Symposium in Civil Engineering July 21 to 23, 2014, Université Laval, Québec, Canada.
46. **P.M. Calvi**, **T.J. Sullivan**, “Estimating Floor Spectra in Multiple Degree of Freedom Systems”, Proceedings of the 10th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute, Anchorage, AK, 2014.
47. **T.J. Sullivan**, **P.M. Calvi**, D.P. Welch, “Estimating roof-level acceleration spectra for single storey buildings”, Proceedings of the 4th ECCOMAS thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Kos island, Greece, 2013.
48. **P.M. Calvi**, M. Pingaro, **P. Venini**, “Truly-mixed finite-elements for the analysis of viscoelastic devices”, Proceedings of the 20th AIMETA Conference, Bologna, Italy, 2011.
49. **P.M. Calvi**, **P. Venini**, “Toward a novel approach for damage identification and health monitoring of bridge structures”, Proceedings of the 19th AIMETA Conference, Ancona, Italy, 2009.

Professional society memberships.

International Federation for Structural Concrete (FIB), 2024 - present
American Concrete Institute (ACI), 2016 - present
Earthquake Engineering Research Institute (EERI), 2016 - present
International Association for Bridge and Structural Engineering (IABSE), 2016 – 2019
Member of Italian Society for Civil Engineering, 2011 - present

Referee/Reviewer

Journals (not updated - incomplete list): Journal of Earthquake Engineering, Earthquake Engineering and Engineering Vibration, ACI Structural Journal, Earthquake Spectra, Smart Structures and Systems, An International Journal, Engineering Structures, Journal of Structural Engineering, International Journal of Advanced Structural Engineering, European Journal of Environmental and Civil Engineering, Civil Engineering Infrastructures Journal, Geosciences.

Conferences (some examples - incomplete list): 15th World Conference on Earthquake Engineering (Lisbon, September 2012), 39th IABSE Symposium – Engineering the Future (Vancouver, September 2017), 16th World Conference on Earthquake Engineering (Santiago, Chile 2017), 16th European Conference on Earthquake Engineering.

GRADUATE STUDENTS

Chaired Doctoral Students

Student Name	My Role	Dissertation Topic	Completed	Current Employer
Tianye Yang	Co-chair (w/ Wiebe)	High Performance Friction Type Bearings for Seismic Isolation	Spring, 2020	Consulting Engineer at Simpson Gumpertz & Heger
Eleonora Bruschi	Co-chair (w/ Quaglini)	Design and characterization of Lead-Extrusion Dampers with adaptive behaviour	Autumn 2021	Asst. Prof. at Polytechnic of Milan
William Galik	Chair	Assessment of Reinforced Concrete Structures based on Direct Crack-Based Approaches	Autumn 2025	Asst. Prof. at Idaho State University

Current Doctoral Students

Student Name	My Role	Dissertation Topic	Status	Estimated Completion
Aldo Rapone	Chair	Long-Term Performance Assessment of Base Isolated Buildings through Field Testing	Passed qualifying exam	Autumn, 2026
Daniel Gaxiola	Co-chair (w/ Stanton and Wiebe)	TBD	Pre-qualifying exam	Spring, 2028

Chaired Masters Students

Student Name	My Role	Level of Supervision	Thesis Topic	Completed (year)	Current Employer
Benedikt Farag	Co-chair (w/ Thonstad)	MSCE Thesis	Predicting The Shear Strength of Macro-Synthetic Fiber-Reinforced Concrete using Finite Element Models	Spring 2024	Grad. Student at Yale University
John Paul Gaston	Co-chair (w/ Thonstad)	MSCE Thesis	Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete Panels	Spring 2023	KPFF
William Galik	Chair	MSCE Thesis	The Use of Analytical and Numerical Methods to Investigate the Timing of the Morandi Bridge Collapse	Summer 2021	Asst. Prof. at Idaho State University
Ann Albright	Chair	MSCE Thesis	Experimental Study on Steel-Concrete Composite NPS System Beam Column Joints Under Reversed Cyclic Earthquake Loading	Spring 2021	Assistant Professor at Cal Poly
Danielle Voytko	Co-chair (w/ Stanton)	MSCE Thesis	Evaluation of the Shear Strength of Ultra High-Performance Concrete	Spring 2021	Seattle Academy

Student Name	My Role	Level of Supervision	Thesis Topic	Completed (year)	Current Employer
Tatsuiko Sweet	Co-chair (w/ Lowes)	MSCE Research Project	NA	Winter 2021	University of Washington
Stephan Ahn	Co-chair (w/ Lehman)	MSCE Thesis	Shear Friction Capacity of Concrete Joints with High Strength Reinforcement	Spring, 2020	Mackenzie, Seattle
Sam Turner	Co-chair (w/ Stanton)	MSCE Thesis	Seismic Retrofit of Bridges Supported on Hollow Core Prestressed Concrete Pile-Columns	Winter, 2020	Coughlin Porter Lundeen
Sarah Bergquist	Co-chair (w/ Wiebe)	MSCE Thesis	Behavior and Design of an Adaptive Variable Friction Base-Isolation System	Spring, 2019	Degenkolb Engineers
Tasha Tardieu	Co-chair (w/ Stanton)	MSCE Thesis	Seismic Evaluation of Hollow Core Prestressed Concrete Bridge Column-Piles in Washington State	Spring, 2019	Unknown
Audrey Davaadordj	Co-chair (w/ Stanton)	MSCE Thesis	Shear Stress Transfer across Concrete-to-Concrete and Steel-to-Concrete Interfaces	Spring, 2018	KPFF Consulting Engineers
Timothy Peruchini	Co-chair (w/ Stanton)	MSCE Thesis	Investigation of Ultra High-Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders	Winter, 2017	Reid Middleton
Sandip Timsina	Chair	MSCE Thesis	A Study of Variable Friction Base Isolation Systems	Spring, 2017	Fossatti Pawlak Structural Engineers
Abigail Christman	Chair	MSCE Thesis	Earthquake Risk Assessment of Reinforced Concrete Bridges in Washington State Using Pushover Analysis	Spring, 2017	Thornton Tomasetti
Leikune Aragaw	Chair	MSCE Thesis	Floor Response Spectra in Hybrid Base-Rocking and Reinforced Concrete Wall Buildings	Spring, 2017	Magnusson Klemencic Associates

Current Masters Students

Student Name	My Role	Level of Supervision	Status	Estimated Completion
Charles O Brian	Chair	MSCE Thesis	First year	Spring, 2027
Shean Walshe	Co-chair (w/ Stanton and Thonstad)	MSCE Thesis	First year	Spring, 2027

Undergraduate Students Supervision (not updated - incomplete list)

Student Name	My Role	Level of Supervision	Status	Estimated Completion
Younis Riyami	Advisor	Individual Study	Completed	Spring, 2020
Ian McWhirter	Advisor	Individual Study	Completed	Summer/Fall, 2017
Dakota Hunsaker	Advisor	Individual Study	Completed	Summer, 2017

Other Significant Student Supervision

Visiting graduate student advising

Student Name	My Role	Level of Supervision	Home Institution	Dates of Supervision
Nicola Scattarreggia (PhD)	Advisor during visitation	PhD Dissertation	IUSS Pavia (Italy)	2020-2021
Luca Zoccolini (PhD)	Advisor during visitation	PhD Dissertation	Polytechnic of Milan	2023
Andrea Orgnoni (PhD)	Advisor during visitation	PhD Dissertation	IUSS Pavia (Italy)	2020-2021
Huang Weiguo (PhD)	Advisor during visitation (co-advisor: Wiebe)	Research project	Nanjing Tech University, China	2020-2021
Mohamad Alipour (PhD)	Co-advisor during visitation (advisor: Miller)	Research project	University of Virginia	2018
Huan Zhang (PhD)	Advisor during visitation (co-advisor: Lehman)	Research project	HIT (China)	2018-2019
Alexander Kagermanov (Post-Doc)	Advisor during visitation	Research project	UME School (Italy)	2016-2017
Giulia Scagliotti (MSCE)	Advisor during visitation	MSCE Thesis	University of Pavia, Italy	2016-2017 (Graduation 2017)

Membership on PhD degree committees

Student Name	Department, Institution	Degree	Date
Samiullah Bangash	CEE, UW	PhD	TBD
Chathura Gamaralalage	University of Liege, Belgium	PhD	TBD
Donghoon Ji	Civil and Construction Engineering, OSU	PhD	2025 (expected)
Andrea Natale	CEE, University of Naples "Federico II"	PhD	Autumn, 2023
Sarah Wichman	CEE, UW	PhD	Autumn, 2023
Jarrod Zaborac	CEE, UT Austin	PhD	Spring, 2021
Tom Lin	CEE, UW	PhD	Autumn, 2021
Kamal Ahmed	CEE, UW	PhD	Summer, 2021
Nikola Tatar	CEE, University of Liege	PhD	Fall, 2020

Rouzbeh Davoudi	CEE, UW	PhD	Spring 2019
A. Gonzalez-Fonseca	CEE, IUSS Pavia	PhD	Winter, 2016
D. Welch	CEE, IUSS Pavia	PhD	Winter, 2016
A. Kagermanov	CEE, IUSS Pavia	PhD	Winter, 2016
R. Milanesi	CEE, IUSS Pavia	PhD	Winter, 2016
C. Nievas	CEE, IUSS Pavia	PhD	Winter, 2016
G. O'Reilly	CEE, IUSS Pavia	PhD	Winter, 2016
M. Oliaeef	CEE, IUSS Pavia	PhD	Winter, 2016
A. Rosti	CEE, IUSS Pavia	PhD	Winter, 2016
C. Zelaschi	CEE, IUSS Pavia	PhD	Winter, 2016

Membership on Masters' degree committees

Student Name	Department	Degree	Date
Daniel Gaxiola	CEE, UW	MSCE	Spring, 2025
HONG CHING	DASTU, Polimi, Milan	MSCE	Spring, 2024
AITBAYEV AIDYN	DASTU, Polimi, Milan	MSCE	Spring, 2024
Tara Daoud	DASTU, Polimi, Milan	MSCE	Spring, 2024
Cansu Erdoğan	DASTU, Polimi, Milan	MSCE	Spring, 2024
Saliha Elif Ulus	DASTU, Polimi, Milan	MSCE	Spring, 2024
Longo Lorenzo	DASTU, Polimi, Milan	MSCE	Spring, 2024
Yang Yue	DASTU, Polimi, Milan	MSCE	Spring, 2024
Tay Jit Ying	DASTU, Polimi, Milan	MSCE	Spring, 2024
Russo Marco	DASTU, Polimi, Milan	MSCE	Spring, 2024
Rode Carolin	DASTU, Polimi, Milan	MSCE	Spring, 2024
Battiferri Giulio	DASTU, Polimi, Milan	MSCE	Spring, 2024
Yueyi Du	DASTU, Polimi, Milan	MSCE	Spring, 2024
Ziyi Gao	DASTU, Polimi, Milan	MSCE	Spring, 2024
Ibrahim Yagiz Arici	DASTU, Polimi, Milan	MSCE	Spring, 2024
Katerina Charalambides	DASTU, Polimi, Milan	MSCE	Spring, 2024
Gabrielle Hannah cheung	DASTU, Polimi, Milan	MSCE	Spring, 2024
Ferracioli Simone	DASTU, Polimi, Milan	MSCE	Spring, 2024
Rimini Alice	DASTU, Polimi, Milan	MSCE	Spring, 2024
Hanzala Khan	DASTU, Polimi, Milan	MSCE	Spring, 2024
Madhuli Awasarkar	DASTU, Polimi, Milan	MSCE	Spring, 2024
Laila Goubran	DASTU, Polimi, Milan	MSCE	Spring, 2024
Sara Mucollari	DASTU, Polimi, Milan	MSCE	Spring, 2024
Can Cobanoglu	DASTU, Polimi, Milan	MSCE	Spring, 2024
Mouannes Christelle	DASTU, Polimi, Milan	MSCE	Spring, 2024
Sun Yanni	DASTU, Polimi, Milan	MSCE	Spring, 2024
Ferrari Filippo	DASTU, Polimi, Milan	MSCE	Spring, 2024
Blazhko Maiia	DASTU, Polimi, Milan	MSCE	Spring, 2024
Hank Knight	CEE, UW	MSCE	Spring, 2023
Josh Stokley	CEE, UW	MSCE	Autumn, 2022
Carolyn Donohoe	CEE, UW	MSCE	Summer, 2022
Benjamin Terry	CEE, UW	MSCE	Summer, 2022
Ray Yu	CEE, UW	MSCE	Summer, 2021
Kayla Wielgus	CEE, UW	MSCE	Spring, 2020
Anne Magnus	CEE, UW	MSCE	Fall, 2019
Jakob Sumearll	CEE, UW	MSCE	Spring, 2017

Sarah Wichman	CEE, UW	MSCE	Spring, 2017
Kristina Tsvetanova	CEE, UW	MSCE	Fall, 2016
Andrew Yang	CEE, UW	MSCE	Summer, 2016

RESEARCH ACTIVITIES

Total research funding: \$4,572,087

Total of my amounts: \$1,744,217

Funded Research

Funding Agency	Title	My role with other PI's and co-PI's	Total Amount, my amount, (subcontracts, Matching if any)	Dates (start – finish)
RRF	<i>Development of a Degrading Crack Model for Direct Crack-Based Assessment of Damaged Reinforced Concrete Structures</i>	Sole PI	Total: \$40,000, My Amount: \$40,000	03/2026 - 03/2027
TECNOSTRUTTURE	<i>Pilot Study on the Response of Steel-Concrete Composite beam-column joints with Circular Columns</i>	Sole PI	Total: \$9,400, My Amount: \$9,400	10/2025 - 10/2026
NCHRP	<i>Design and Testing of High-Load Multi-Rotational Disc Bearings for Bridges</i>	PI (Co-PIs: Stanton and Thonstad, UW)	Total: \$600,000, My Amount: \$200,000	01/2026 – 01/2029
ERIES https://experiments.bulldenvdata.eu/datasets/86	<i>Long Term Performance Assessment of Base Isolated Buildings</i>	PI (Co-PI: Tracy Becker, UC Berkeley; Haluk Sucuoglu, METU)	Total: \$255,000, My Amount: \$200,000	01/2024 – 01/2027
USDOT/FIU	<i>Accelerated Bridge Construction University Transportation Center</i>	Senior Personnel (PI: Stanton; Co-PI: Eberhard)	Total: \$825,000	2023 – 2028
TECNOSTRUTTURE	<i>Numerical Response of Full-Scale Steel-Concrete Composite beam-column joints</i>	Sole PI	Total: \$35,000, My Amount: \$35,000	01/2023 - 06/2023
ABC-UTC	<i>Exploring the Combined Use of Distributed Fiber and Deformed Bar Reinforcement to Resist Shear Forces</i>	Co-PI (PI: Thonstad, UW)	Total: \$140,000, (\$70,000 UW match) My Amount: \$70,000	09/2022 - 09/2024
TECNOSTRUTTURE	<i>Shear behavior of a novel steel-concrete composite system</i>	Sole PI	Total: \$30,000, My Amount: \$30,000	03/2022 - 03/2023

Funding Agency	Title	My role with other PI's and co-PI's	Total Amount, my amount, (subcontracts, Matching if any)	Dates (start – finish)
ACI Foundation's CRC	<i>Shear Behavior of Macro-Synthetic Fiber-Reinforced Concrete</i>	Co-PI (PI: Thonstad, UW)	Total: \$89,500, (\$32,000 UW match) My Amount: \$30,000	09/2021 - 06/2023
PacTrans	<i>LiDAR, Drones and BrIM for Rapid Bridge Inspection and Management</i>	UW PI (PI: Turkan, OSU)	Total: \$300,000 (\$90,000 OSU match; \$60,000 UW match) My Amount: \$120,000	03/2021 - 03/2023
TECNOSTRUTTURE	<i>Experimental Testing of a novel precast beam-to-column connection</i>	Sole PI	Total: \$210,000, My Amount: \$210,000	03/2020 - 03/2022
NSF	<i>RAPID/ COLLABORATIVE RESEARCH: Japan-U.S. Collaboration on the Seismic Performance of Reinforced Concrete Structures</i>	PI (Co-PI: Lowes, UW; Moustafa, UNR)	Total: \$188,700 My Amount: \$134,080	11/2019 – 10/2020
Mosayk	<i>Assessment of bridges subjected to impact loads</i>	Sole PI	Total: \$128,380, My Amount: \$128,380	09/2019 - 09/2020
TECNOSTRUTTURE	<i>Development of a novel precast beam-to-column connection</i>	Sole PI	Total: \$67,768, My Amount: \$67,768	01/2019 - 01/2020
ABC-UTC	<i>Evaluation of the Shear Strength of UHPC</i>	UW PI (Co-PI: Stanton, UW)	Total: \$110,000, My Amount: \$55,000	03/2019 – 03/2020
ACI Foundation's CRC	<i>Shear Friction Capacity of Concrete Joints with High Strength Reinforcement</i>	PI (Co-PI: Lehman, UW)	Total: \$87,500, (\$30,000 UW match) My Amount: \$58,750	01/2019 – 06/2020
USDOT/FIU	<i>Accelerated Bridge Construction University Transportation Center</i>	Senior Personnel (PI: Stanton; Co-PI: Eberhard)	Total: \$820,000	2018 – 2024
SERA https://experiments.builtenvdata.eu/datasets/36	<i>Dynamic testing of variable friction seismic isolation devices and isolated systems</i>	UW PI (PI: Haluk Sucuoglu, METU)	Total: \$210,000, My Amount: \$105,000	01/2018 - 01/2019
WSDOT	<i>Seismic Evaluation and Retrofit of Hollow Precast Concrete Pile-Columns</i>	Co-PI (PI: Stanton, UW)	Total: \$190,000, My Amount: \$95,000	04/2017 - 03/2019
RRF	<i>Development of high-tech seismic protection devices based on sliding between</i>	Sole PI	Total: \$35,239, My Amount:	03/2017 - 03/2018

Funding Agency	Title	My role with other PI's and co-PI's	Total Amount, my amount, (subcontracts, Matching if any)	Dates (start – finish)
	<i>variable-friction curved surfaces</i>		\$35,239	
PCI	<i>Shear Stress Transfer across Steel to Concrete Interfaces and Effects of Dowel Action</i>	PI (Co-PI: Stanton, UW)	Total: \$85,000, (\$50,000 UW match) My Amount: \$67,500	09/2016 - 09/2017
WSDOT	<i>Investigation of Ultra-High Performance Concrete for Longitudinal Joints in Deck Bulb Tee Bridge Girders</i>	Co-PI (PI: Stanton, UW)	Total: \$125,000, My Amount: \$62,500	07/2015 - 06/2017

Pending proposals

Funding Agency	Title	My role with other PI's and co-PI's	Total amount, my amount, (Subcontracts, Matching if any)	Dates (start – finish)
TECNOSTRUTTURE	<i>Development of a new family of dissipative seismic bracing systems</i>	Sole PI	Total: \$80,000, My Amount: \$80,000	09/2025 – 09/2026
OSU	<i>Seed Fund</i>	Collaborator	Total: \$50,000,	09/2025 – 09/2026
NSF	<i>Enhancing Bridge Durability and Homeland Security Through Segmental Cantilever Technology</i>	UW PI (PI: Gabaldon, Notre Dame)	Total:\$1,471,518, My Amount: \$525,000	TBD

DOCUMENTATION OF TEACHING EFFECTIVENESS

Courses Taught & Student Evaluations

Students rated the courses on a scale of 0-5 [0 = very poor, 1 = poor, 2 = fair, 3 = good, 4 = very good, 5 = excellent]

Item 1, "The course content as a whole was"

Item 3, "The instructor's contribution to the course was"

Item 4, "The instructor's effectiveness in teaching the subject was"

Reported scores are adjusted medians, which have been corrected by *IASystem* to control for differences in class size, expected grade, and reason for enrollment based on regression analyses of ratings over the previous two academic years in all classes at UW.

Course	Title	Quarter	Credit Hrs	Enrol .	Evals.? Response	Item 1	Item 3	Item 4	Avg. of 1-4
CESG 530	Seismic Design	Spring 2026	3	-	-	-	-	-	-
CEE 451	Metal Str. Design	Autumn 2025	3	44	Yes, 17/44	4.7	4.9	4.8	4.8
CESG 502	Str. Dyn.	Autumn 2025	4	36	Yes, 22/36	4.5	5.0	5.0	4.8
CEE** 220	Mech. Of Mat.	Summer 2025	4	41	Yes, 16/41	4.8	4.9	4.8	4.8
CEE** 220	Mech. Of Mat.	Summer 2024	4	34	Yes, 15/34	4.2	4.4	4.6	4.6
CESG** 599	Seismic Design	Summer 2024	3	13	Yes, 7/13	4.3	4.3	4.4	4.4
CEE** 220	Mech. Of Mat.	Summer 2023	4	22	Yes, 3/22	5.1	5.0	5.0	5.1
CESG** 599	Seismic Design	Summer 2023	3	17	Yes, 4/17	5.1	5.0	5.0	5.1
CESG** 502	Str. Dyn.	Winter 2023	4	21	Yes, 17/21	4.8	4.9	4.9	4.9
CESG** 599	Seismic Design	Summer 2022	3	16	Yes 9/16	4.1	4.4	4.2	4.3
CESG** 502	Str. Dyn.	Winter 2022	4	27	Yes, 6/27	5.1	5.3	5.3	5.2
CESG* 526	Eq. Eng. I	Spring 2021	3	24	Yes, 10/23	3.6	4.2	4.0	4.0
CESG* 502	Str. Dyn.	Winter 2021	4	29	Yes, 4/29	4.6	4.6	4.9	4.7
CEE* 452	Reif. Conc.	Fall 2021	3	38	Yes, 15/38	3.8	4.1	3.8	4.0
CESG 502	Str. Dyn.	Winter 2020	4	39	Yes, 18/39	4.8	5.0	4.8	4.9
CEE 220	Mech. Of Mat.	Fall 2019	4	69	Yes, 16/69	4.5	4.9	4.6	4.7
CESG 526	Eq. Eng. I	Spring 2019	3	38	Yes, 23/38	4.2	4.2	4.2	4.2

Course	Title	Quarter	Credit Hrs	Enrol .	Evals.? Response	Item 1	Item 3	Item 4	Avg. of 1-4
CESG 502	Str. Dyn.	Winter 2019	4	41	Yes, 19/41	4.6	4.6	4.7	4.6
CEE 220	Mech. Of Mat.	Fall 2018	4	71	Yes, 40/71	4.5	4.8	4.9	4.6
CESG 526	Eq. Eng. I	Spring 2018	3	29	Yes, 18/29	4.6	4.8	4.9	4.7
CESG 502	Str. Dyn.	Winter 2018	3	30	Yes, 28/30	4.5	4.4	4.4	4.4
CEE 220 A	Mech. Of Mat.	Spring 2017	4	229	Yes, 150/229	4.2	4.4	4.3	4.3
CEE 220 B	Mech. Of Mat.	Spring 2017	4	48	Yes, 30/48	4.2	4.2	4.1	4.2
CEE 502	Str. Dyn.	Winter 2017	3	44	Yes, 32/44	4.2	4.0	4.3	4.2
CEE 502	Str. Dyn.	Winter 2016	3	43	Yes, 32/43	3.7	3.7	3.6	3.7
CEE 220	Mech. Of Mat.	Fall 2015	4	46	Yes, 22/46	3.3	3.9	3.3	3.4

*Remote teaching

**Hybrid teaching

Peer Teaching Evaluations

Course	Quarter	Reviewer
CESG 526	Spring 2021	Richard Wiebe
CESG 526	Spring 2020	Marc Eberhard
CESG 526	Spring 2019	John Stanton
CESG 526	Spring 2018	Jeffrey Berman
CEE 220	Spring 2017	Michael Motley
CEE 502	Winter 2016	John Stanton

List of other teaching contributions

- AA 210 – Statics as part of Engineering Italy Program at UW Rome
- CEE 398 Engineering Experience Learning. EERI Student Chapter Seminar Series, 2025 – Present (Enrollment: ~25 students; Hours of teaching: 15)
- FIU-ABC Webinar, November 8, 2019. “Evaluation of the Shear Strength of UHPC”.
- CEE 500 Structure’s Group Seminar Series – Autumn 2017, Winter 2019 and Winter 2020
- CEE 500 Seminar – Spring 2016. “Concepts and Technologies for Base Isolation of Buildings”.
- ERASMUS MUNDUS MASTER COURSE: “Advanced Design of Reinforced Concrete Structures” (Part of: Sustainable Constructions under Natural Hazards and Catastrophic Events), December 2016, University of Liege, Belgium. (Enrollment: 17; Hours of teaching: 30).
- Course “Reinforced Concrete Structure” part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2022. (Enrollment: 9; Hours of teaching: 30).

- Course “Structural Design and Seismic Vulnerability”, graduate course, Department of Architecture, Polytechnic of Milan, Italy, Academic Year 2023 - 2024. (Enrollment: 30; Hours of teaching: 60).
- Course “Strutture e Criteri di Progettazione Antisismica”, graduate course (in Italian), Department of Architecture, Polytechnic of Milan, Italy, Academic Year 2023 - 2024. (Enrollment: 30; Hours of teaching: 60).
- Course “Reinforced Concrete Structure” part of the Civil Engineering for Mitigation of Risk from Natural Hazards Program, University of Pavia, Italy, October-November 2024. (Enrollment: 8; Hours of teaching: 30).

Other supporting documents

None

Teaching Awards, Nominations for Teaching Awards

- Teaching Assistant Award Nomination, 2013, Department of Civil and Environmental Engineering, University of Toronto
- Distinguished Teaching Award Nomination, 2019, University of Washington

SERVICE

Departmental service

- Associate Chair for Community (2025 – Present)
- Chair of Community Committee (2025 – Present)
- Appointments & Reappointments Committee (2025 – Present)
- Graduate Coordinator, Structural Engineering and Mechanics group, 2021 – present
- CEE Education Committee; Lead of Graduate Education sub-Committee, 2023 – present
- Graduate Education Committee, 2021 – 2023
- Co-Graduate Advisor, Structural Engineering and Mechanics group, 2019 – 2021
- Valle Scholarship and Scandinavian Exchange Program Application Reviewer, 2020
- Structural Laboratory Associate Director, 2019 – 2022
- CEE Faculty Search Executive Committee – Structures (2019)
- CEE Undergraduate Scholarship Applications Reviewer – May 2019
- CEE Mentoring Committee (for Dr. Brett Maurer and Dr. Julian Yamaura), 2018 – present
- Faculty Affairs Committee, 2016 – 2021 (chaired in 2017)
- UW EERI Student Chapter Faculty Advisor, 2016 – present
- Undergraduate Admission Committee, 2016 and 2017
- Engineering Discovery Days, 2016 and 2017
- Structural Laboratory Committee, 2015 – present
- Graduate Education Committee, 2015 – 2016

College service

- Co-Leader Study Abroad Program “Engineering Italy: Engineering Fundamentals in the Eternal City”, 2025 – Present
- UW STARS students Faculty mentor (NSF Grant “The Redshirt in Engineering Consortium), 2016 – present
- CEE Representative on the College of Engineering DEI Community of Practice, 2026 - Present

University service

None

Professional society and other service

- Member of Fib Task Group, Seismic Design, October 2024 – present
- Organizing Committee Member 2024 EERI Annual Meeting and Seismic Design Competition
- Editorial board “Buildings” Journal 2023 - present
- Session organizer. Special Session: “New Perspectives in Seismic Isolation and Energy Dissipation for Vibration Control of Structures”, 18th World Conference on Earthquake Engineering, 24WCEE, Milan, Italy, June 30th to July 5th, 2024
- Session organizer. Special Session: “Shear Critical Concrete Structures Subjected to Seismic Loads: Behavior, Assessment and Retrofit”, 18th World Conference on Earthquake Engineering, 24WCEE, Milan, Italy, June 30th to July 5th, 2024
- National Academic Qualification as Full Professor (Italy), February 2023
- Session organizer. Minisymposium MS25: “Towards seismic resilience: strategies and technological innovation for seismic risk reduction of existing structures”, at COMPDYN2023, 9th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering. Athens, Greece, June 2023
- Member of ACI “shear friction task group”, subtasks “Experimental database development” and “Design model development”, January 2022 - present
- Member of the Committee reviewing applications for postdoctoral research fellowships in Modelling and Engineering Risk and Complexity (MERC) at Scuola Superiore Meridionale (Naples, Italy), August-September 2021
- Member of Alaska Department of Transportation Committee AKB50, Standing Committee on Seismic Design and Performance of Bridges, April 2021 – present
- Panelist at Joint NHERI@UC San Diego - RAPID Researcher Workshop 2020, December 2020
- Session organizer, 17th World Conference on Earthquake Engineering (17WCEE), Sendai, Japan, September 2021
- Member of ACI Committee 374, Performance-Based Seismic Design of Concrete Buildings, April 2018 – present
- National Academic Qualification as Associate Professor (Italy), September 2018
- Member of ACI - Chester Paul Siess Award for Excellence in Structural Research (SA03), 2017 – 2019
- Member of the Scientific Committee (SC) for the IABSE Symposium in Vancouver, September 2017
- Professional Engineering Licence (Italy), 2011

Community service

- Provided seismic assessment advice for natural gas treatment structures to international firms including Prodeval (France), Fornovo (Italy), and Air Dep (Italy), 2025.
- Assisted KEDMOR Engineers LTD and Yaron Offir Engineers with the implementation of the document “Structural Classification, Assessment and Retrofit Methodologies for Existing Bridges for Earthquake Excitations”, which serves as Pre-Standard document for the Israeli Bridge Seismic Guideline, 2024

- Provided expert advice on the implementation of a system of Active Mass Dampers to mitigate the dynamic effects of wind in the “Torre Piloti” Design by architect Renzo Piano and built in the Port of Genoa (Italy). Construction complete in October, 2024.
- Provided expert advice on the implementation of a Base Isolation System to mitigate the effects of earthquakes in a hospital in Santiago, Chile. 2024.
- Provided expert advice on the assessment of the Giuseppe Meazza “San Siro” Stadium (Milan, Italy) – Activities performed: non-linear modeling and dynamic analysis of “II Anello” portion of the structure. 2023
- Member of working group investigating the collapse of the Morandi Bridge (Italy), 2018 – 2021.
- Provided expert advice for NAM "Scope item 30 - Expert system for building 2017" and "Scope item 34 - Coordination and technical assurance of TRI / ARMOX CWG product development" (06/2017 – 06/2018).
- Provided expert advice for Studio Calvi s.r.l. (Pavia, Italy). Seismic assessment of unreinforced masonry houses in the Groningen area (09/2017 – 09/2018).
- Provided expert advice for Studio Calvi s.r.l. (Pavia, Italy). Seismic assessment of unreinforced masonry church inventories in the Groningen area (09/2017 – 09/2018).
- Member of the EERI Reconnaissance (Central Italy Earthquake, August 24, 2016).
- Provided expert advice for Eucentre Foundation (Pavia, Italy). Development of preliminary assessment tools for damaged reinforced concrete bridge structures (12/2014 – 06/2015).
- Provided expert advice for Eucentre Foundation (Pavia, Italy). Preparation of preliminary guidelines for the mitigation of the seismic vulnerability of non-structural elements in school buildings in Italy (12/2014 – 06/2015).

International, national or governmental service

- National Science Foundation (NSF) Panelist. Proposal reviewed: 11. 2025.
- Natural Sciences and Engineering Research Council of Canada (NSERC), Civil, Industrial and Systems EG 1509, Reviewer. January 2025.
- National Science Foundation (NSF) Panelist. Proposal reviewed: 10. 2024.
- Fonds de la Recherche Scientifique (FNRS), Belgium. Proposal Reviewer. February 2023.
- National Science Foundation (NSF) Panelist. Proposal reviewed: 23. 2018.
- Concrete Research Council (CRC) of the ACI Foundation Panelist. Proposal reviewed: 8. 2020.
- External reviewer for the Italian National Agency for the Evaluation of Universities and Research Institutes (ANVUR).

All other service

None