

## CURRICULUM VITAE

David V. Rosowsky, Ph.D., F.ASCE, F.SEI

Leadership website:

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### BRIEF BIO:

**David V. Rosowsky** is a Professor of Civil Engineering at the University of Vermont, where he also served as Provost and Senior Vice President for six years (2013-2019). Prior to joining UVM as Provost, Dr. Rosowsky served as the 15<sup>th</sup> Dean of Engineering at Rensselaer Polytechnic Institute (2009-2013), and before that as Head of the Zachry Department of Civil Engineering at Texas A&M University (2004-2009), where he also held the A.P. and Florence Wiley Chair in Civil Engineering. He also previously held the Richardson Chair in Wood Engineering and Mechanics at Oregon State University (2000-2004).

As UVM Provost, Dr. Rosowsky served as the chief academic officer and chief budget officer and was responsible for enhancing the University's intellectual climate, strengthening instruction and scholarship, advancing diversity, creating an outstanding student experience, promoting student access to success, and identifying investments and efficiencies ensuring a thriving future for the University.

In addition to his research publications, Dr. Rosowsky has published extensively on topics related to higher education and leadership. In the last year, his writing on these topics has been published in *The Chronicle of Higher Education*, *Inside Higher Education*, *Forbes*, *AdWeek*, *University Business*, *Trusteeship*, and several other print and online publications.

Since 1990, Dr. Rosowsky has conducted research in the areas of structural reliability, performance of wood structural systems, design for natural hazards, stochastic modeling of structural and environmental loads, and probability-based codified design. His current research addresses three topics: (1) behavior of the built environment subject to natural hazards, most recently including the effects of climate change and adaptation, (2) modeling and analysis of load effects on buildings and other structures with particular emphasis on complex environmental phenomena, and (3) performance-based engineering for design, post-disaster condition assessment, and loss estimation studies. He currently serves on the Editorial Board of the journal *Structural Safety* and the journal *Sustainable and Resilient Infrastructure*, and is a past editorial board member of the *ASCE Journal of Infrastructure Systems*, the *ASCE Journal of Structural Engineering* and the journal *Natural Hazards Review*.

As a researcher, Dr. Rosowsky has authored or co-authored more than 150 papers in peer-reviewed journals and more than 140 papers appearing in conference proceedings. A recognized expert in the field of structural reliability, he has been invited to present his research work around the world including invited lecturers in France, Italy, Switzerland, Canada, Japan, Australia and New Zealand. He has supervised more than 20 Masters and Doctoral students. He is the recipient of the ASCE Walter L. Huber Research Prize, the T.K. Hsieh Award from the Institution of Civil Engineers (UK), and the ASCE Norman Medal.

Dr. Rosowsky maintains an active research program in wind and earthquake engineering and continues to supervise graduate students and post-doctoral researchers. He is a member of numerous editorial boards, national technical committees, is a registered Professional Engineer, and holds the rank of Fellow of the American Society of Civil Engineers and Fellow of the Structural Engineering Institute.

**RESEARCH IMPACT:**

## **PART I:**

### **HIGHLIGHTS, ACHIEVEMENTS, AND RECOGNITIONS SINCE 2013**

The “Innovation and Entrepreneurship Ecosystem” concept and initiative set was created by UVM Provost Rosowsky in 2013. It was driven by concomitant initiatives and investments in STEM (programs, facilities), interest in creating opportunities (curricular and co-curricular programs as well as business development programs) for students and faculty around innovation and entrepreneurship, and a quickly evolving startup ethos (several tech, software, bioscience, and fintech startups; business incubators; new co-working spaces) in Burlington, VT.

Provost Rosowsky laid out a bold and ambitious vision for creating an innovation culture on the UVM campus, where one had not existed previously, that would respond to growing interest in innovation and entrepreneurship on the campus and leverage nascent activities in and around Burlington, helping to establish Burlington, VT as a viable and compelling location for startups, innovators, tech entrepreneurs, and investors.

#### **Examples of successful initiatives:**

Under the leadership of the provost, we have created entirely new **branding, marketing, and communications** strategy at the University to focus on academic initiatives, research, and innovation. Effort commenced with a three-year contract with a marketing and branding firm with considerable experience creating visibility and engagement for major academic institutions, allowing in-house talent, expertise, and capabilities to be developed. Results include more successful student recruitment from expanded and new markets (new revenue), greater national press for academic and research programs (greater visibility), creation and adoption of a university-wide style guide (consistent messaging), and university-wide strategies (print, web, social media) for consistent and effective marketing, branding, and both internal and external communication. This has transformed the way we message (to stakeholders ranging from prospective students to major donors) the value, impact, and potential of the University.

The provost has significantly increased opportunities for faculty and student engagement in the Vermont Center for Emerging Technologies (VCET). **VCET** provides space, services, mentorship, seminars, as well as connections to investors and other financing opportunities. With co-working space downtown (just blocks away from the UVM campus, and now also embedded in the UVM campus, VCET has become an integral part of UVM’s innovation and entrepreneurship ecosystem. The provost serves on the board of VCET along with other technology, innovation, and economic development leaders.

Under the provost’s leadership, UVM’s Office of Technology Transfer was reimagined and rebranded (with expanded staff and responsibility to meet growing needs with the increase in innovation activity across the campus) as **UVM Innovations**. Plans are underway to relocate UVM Innovations to a new space in 2019 that will also include space for SPARK teams, student entrepreneurship activities, embedded industrial researchers, entrepreneurs-in-residence.

Recognizing the early success of the nascent **SPARK-VT** program in the Department of Medicine, the provost provided visionary leadership, resources, and direction in expanding the program first to the broader College of Medicine, and then to the entire University. Scaling this innovative program (based on the SPARK program at Stanford, and now recognized as one of the most successful such SPARK spin-offs) resulted in broader faculty engagement, greater investor engagement, and increased IP, patent, tech transfer, and startup activity at the University. Now part of the University’s innovation culture, the success of the SPARK-VT program is helping to attract faculty and researchers to UVM, and has resulted in the launch of a new (and highly successful) brown-bag series for researchers. In 2017, and with support from the Provost and the Vice President for Research, a student entrepreneurship organization on campus launched their own SPARK program specifically for students.

At the request of the provost, the University of Vermont Foundation created and hired staff for a new office for **Corporate and Foundation Relations**. The model was built on successful models at other universities, and was accompanied by a strategic plan for engaging deans, chairs, faculty, and researchers in appropriate fields. University leadership was provided by the provost. Corporate engagement was entirely new for the University of Vermont, and this transition required both a compelling case statement and patience. Persistence in messaging

the importance and value of corporate engagements and partnerships has paid off. In addition to several new major corporate partnerships (through gifts, research contracts, or both), in 2018 the University of Vermont announced its first *Center of Excellence*, the MassMutual Center of Excellence in Complex Systems and Data Science. Additional *Center of Excellence* discussions are underway with several other large companies.

The provost has advocated for (and provided support for) new **innovation spaces** for use by students and faculty. These include innovation classrooms, open-access project spaces, and shared-use spaces. The first such space, “Hills 20,” has served as a model for other innovation spaces. **Innovation and active learning classrooms** now exist in several buildings in the Larner College of Medicine, the College of Engineering and Mathematical Sciences, and the Grossman School of Business. In the coming year, we expect to establish two new innovation spaces on campus, including one for the new Innovation and Entrepreneurship Residential Learning Community.

### **UVM Research: growth and highlights**

In his first year (2013), the provost re-envisioned the Office of the Vice President for Research and appointed a new VPR, Dr. Richard Galbraith. The new VPR was given the charge to elevate research and scholarship, and serve faculty to accomplish the same, across the University. Resources were made available for strategically investing in the most promising research directions, the most innovative cross-college teams interested in pursuing large center-level grants, support for faculty grant-writing, seed grants, equipment and matching funds. The VPR also works closely with the provost providing leadership, direction, and resources to support the innovation and entrepreneurship ecosystem.

The VPR also was charged with supporting and growing scholarly activity in those parts of the university without doctoral or research programs. While such scholarship generally requires far less financial investment than laboratory-based, engineering, basic science, and clinical research, its impact can be just as significant in advancing the visibility and reputation of the University as a comprehensive public research university, and provides meaningful learning and discovery opportunities for our students.

Each year the University invests millions of dollars in direct faculty research support, matching funds, faculty startup packages, seed grants, and tech transfer. As part of the provost’s commitment to transparent communication, the magnitude and targets of these investments are reported to the campus annually.

Among the eight *Academic Excellence Goals* established by the provost in 2013 (to undergird and animate the *President’s Strategic Action Plan*) was to grow extramural research across the University. Ambitious goals were established by the provost and VPR in 2013. Despite changes in the federal funding landscape and policies in Washington that presented challenges for all research universities in recent years, UVM’s research portfolio has





**PART II:  
ACADEMIC CV (TEACHING, RESEARCH, SERVICE, LEADERSHIP)**

**RESPONSIBILITIES AS PROVOST AND SENIOR VICE PRESIDENT, 2013-2019**

The Provost/Senior VP is both the Chief Academic Officer and the Chief Budget Officer for the university. The University of Vermont (UVM) is a comprehensive public land-grant university with a total enrollment of 13,000 students (10,000 undergraduate, 75% out-of-state), 3700 faculty and staff, more than 130,000 living alumni, and an array of academic programs (undergraduate, graduate, and professional) across eight colleges/schools (College of Arts & Sciences, College of Engineering and Mathematical Sciences, College of Education and Social Services, College of Agriculture and Life Science, College of Nursing and Health Sciences, College of Medicine, the Rubenstein School of Environment and Natural Resources, and the Honors College), with a general fund budget of \$330M and a total operating budget of more than \$650M annually. The University of Vermont has long held a reputation for outstanding academic programs and faculty, is regarded as a “Public Ivy,” and consistently ranks among the nation’s top universities of its size. UVM is a major research university that attracts about \$13

the model's operation/effectiveness and recommend changes as needed. The new budget model went into effect on July 1, 2015.

Developed a list of eight



Works closely with the President, the leadership of the University of Vermont Foundation, and the Campus Master Planner on all **capital projects**. This includes major capital projects (at various stages of planning, financing, and construction) for the UVM Alumni House, Billings Library, the STEM Complex (Discovery and Innovation), Multipurpose Events Center, and Central Campus Residence Hall.

Leads annual **budget review process** during which all deans and vice presidents present their plans for the coming fiscal year, monitors spending of reserve funds, evaluates fundraising progress and plans, and approves plans for managing through reductions in general fund allocations and/or state appropriations; conducts annual **performance reviews** of all direct reports, including deans, associate and vice provosts, vice presidents, and directors; conducts third-year and fifth-year performance reviews for all deans.

**Leadership hires:** responsibility for hiring of vice presidents, deans, executive directors and directors across academic, research, enrollment management, and student success domains. Of the 24 senior leadership hires I made as provost, 12 of 24 (50%) have been women and 6 of 24 (25%) have been underrepresented minorities.

## **SUMMARY OF ACCOMPLISHMENTS AS DEAN OF ENGINEERING AT RENSSELAER POLYTECHNIC INSTITUTE, 2009-2013 (four years)**

### **RESPONSIBILITIES**

Dean of the School of Engineering (160 faculty and more than 100 staff, 3000 undergraduate students and nearly 700 graduate students, annual budget exceeding \$28M, annual research expenditures exceeding \$50M); oversight, leadership, and strategic direction of all academic, research, and operations of the School of Engineering (SoE), the largest School at RPI with seven academic departments and eleven degree programs; directly reporting to the Provost on all academic matters and to the President on all strategic matters; preparation of annual SoE Performance Plan with input from all directly reporting departments, centers, and units; oversight of SoE external communications, alumni relations, governmental and industry relations, and diversity initiatives; work directly with the Office of Institute Advancement on all development and stewardship activities related to the SoE.

### **UNIVERSITY-WIDE LEADERSHIP**

Member of the Institute President's senior leadership team comprised of ten vice presidents and five academic deans

Senior academic dean; Dean for the largest and oldest of five schools on campus, with the largest percentage of faculty (40%), the largest percentage of undergraduate students (60%), the largest percentage of graduate students (50%), and the largest percentage of extramural research funding (50%)

Member of University-level committee for hiring Constellation Chair professors (e.g., Tissue Engineering and Regenerative Medicine, Biocatalysis, Computational Science and Engineering, Tetherless World, Future Chips)

Focal point for university-wide discussions on Energy Institute, Immersive Simulation, Energy and Environment, Cyber-Security, Water, and Resilient Infrastructure Systems

As Dean of Engineering, launched two new high-profile, university-wide research centers: the Center for Modeling, Simulation, and Imaging in Medicine (2010), and the Center for Flow Physics and Control (2011), both with significant initial funding from industry (e.g., Boeing, Pratt Whitney, GE) and large federal grants (e.g., NIH, NSF, AFOSR)

### **DEVELOPMENT**

Proposed, gained approvals, and implemented first School-based (decentralized) development model in

## DIVERSITY

Created the first “Compact for Diversity” for the School of Engineering. The Compact is a three-part plan and commitment to increase the diversity within the School of Engineering community of scholars at Rensselaer – Part A: Faculty, Part B: Undergraduate Students, Part C: Graduate Students.

Appointed the School’s first underrepresented minority faculty member to hold an endowed chair.

Appointed the School’s first female faculty member to hold an endowed chair.

Leading effort to develop, resource, and implement the *Bridge2 Success Program* (curricular and co-curricular college preparatory and skills program) for entering science and engineering students from underrepresented groups (first offering of Bridge2 program will be Summer 2012)

Appointed first woman Associate Dean and first woman faculty member to School Leadership Team

Expanded responsibilities of Director for Diversity and Outreach to include both undergraduate and graduate students/programs/organizations

Expanded responsibilities for Faculty Coach position (previously focused on female assistant professors) to include advocacy of *all* junior faculty during the pre-tenure probationary period

Championed the construction of a new Child Care Center adjacent to the Rensselaer campus

Met regularly with underJETQq0.00000912 0 612 792 rQq0



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**SUMMARY OF ACCOMPLISHMENTS AS DEPARTMENT HEAD OF CIVIL ENGINEERING AT TEXAS A&M UNIVERSITY, 2004-2009 (five years)**

**DEPARTMENT LEADERSHIP**

Leadership of the largest civil engineering department in the country, with more than 70 full-time







3. Jui-Lin Peng, Ph.D., "Analysis Models and Design Guidelines for High-Clearance Scaffold Systems," Purdue University (co-advised with W.F. Chen), 1994. [Currently on faculty at Chaoyang University of Technology, Taiwan]
4. Thomas D. Reed, M.S., "Wind Resistance of Roof Systems in Light-Frame Construction," Clemson University, 1996.
5. Aditya V. Kothekar, M.S., "Analysis of Vertical Loads on Shoring During Concrete Construction," Clemson University, 1996.
6. Kenneth G. Tyner, M.S., "Uplift Capacity of Rafter-to-Wall Connections in Light-Frame Construction," Clemson University, 1996.
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26. Lauren Mudd, Ph.D. (co-advised with C. Letchford), "A Multi-Hazard Assessment of Climatological Impacts on Hurricanes Affecting the Northeast US: Wind and Rain," Rensselaer Polytechnic Institute, 2014. [Currently Senior Scientist, Applied Risk Associates, Raleigh, NC]
27. Milad Roohi, Ph.D. (co-advised with E. Hernandez), "Performance-based Seismic Monitoring of Minimally Instrumented Buildings," University of Vermont, 2019. [Currently Post-Doctoral Research Associate, NIST Center on Resilience, Colorado State University, Fort Collins, CO]
28. Reza Filizadeh, Ph.D. student (co-advised with E. Hernandez," University of Vermont (expected graduation 2023)

*Service on Graduate Committees (thesis-Masters and Doctoral students)*

1. Yun Lu, M.S., "A Methodology for Updating Deterioration Models in Infrastructure Management," Purdue University, 1993.
2. Pyoyoon Hong, Ph.D. "Service Load Behavior and Reliability of Viscoelastic Parallel-Member Structural Systems," University of Oklahoma, 1994.
3. Dana P. Mizzell, M.S., "Wind Resistance of Sheathing for Residential Roofs," Clemson University, 1994.
4. Sterling J. Pye, M.S., "Effect of In-Service Conditions on the Uplift Resistance of Roof Sheathing," Clemson University, 1995.
5. Bradley E. Means, M.S., "Wind Pressure Variations Over Escarpments," Clemson University, 1995.
6. Xuesong Bai, Ph.D., "Experimental and Numerical Evaluations of Structural Bamboo-Based Composite Materials," Clemson University, Department of Forestry, 1996.
7. Steven C. Dover, M.S., "Uplift Capacity of Sheathing to Light-Metal Framing," Clemson University, 1996.
8. Edward G. Sutt, M.S., "Retrofit of Residential Structures to Resist High Wind Events," Clemson University, 1996.
9. David L. Stricklin, M.S., "Uplift Capacity of Light-Frame Walls With and Without Openings," Clemson University, 1996.
10. Zhiyong Cai, Ph.D., "Damage Assessment in Timber Using Non-Destructive Testing," Purdue University, Wood Research Laboratory, 1997.
11. Sundarajan Mani, M.S., "Influence Functions for Evaluating Roof-Truss to Wall Connections in Low-Rise Buildings," Clemson University, 1997.
12. Muralidhar R. Kallem, M.S., "Roof Sheathing Attachment for High Wind Regions: Comparison of Screws and Nails," Clemson University, 1997.
13. Roland Diaz, M.S., "Modeling the Three Dimensional Behavior of Light-Frame Gable-End Wood Roof Assemblies," Clemson University, 1998.
14. Ali Qizilbash, M.S., "Performance of a Tubular Steel Wall System for Use in Light-Frame Construction," Clemson University, 1999.
15. Jinxia Chen, Ph.D., "Risk-Based Liquefaction Potential Evaluation Using Cone Penetration Tests and Shear Wave Velocity Measurements," Clemson University, 1999.
16. Mihail Chiru-Danzer, Ph.D., "Estimation of Liquefaction-Induced Vertical and Horizontal Displacements Using Artificial Neural Networks and Regression Analysis," Clemson University, 1999.
17. Yan Sun, Ph.D., "Wind Loads on Hurricane Straps: the Role of Structural Influence Functions in Developing Net Loads on Roof Connections," Clemson University, 2000.
18. Edward G. Sutt, Ph.D., "Combined Shear and Uplift Resistance of Roof Sheathing," Clemson University, 2000.
19. David B. Poss, M.S., "Design and Evaluation of Mobile Wind Instrumentation Tower for Hurricane Wind Measurement," Clemson University, 2000.
20. Brian K. Pietras, M.S., "Determination of Design Loads for an Indoor Fabric Shutter System," Clemson University, 2000.
21. Yi Wu, M.S., Project: FE modeling of concrete bridge slabs, Oregon State University, 2002.

22. Jeff Langlois, M.S. (dual-major), "Effect of Reference Displacement and Damage Accumulation on Wood Shear Walls Subjected to the CUREE Protocol," Oregon State University, 2002.
23. Ryan McCormick, M.S., "Seismic Behavior and Analysis of Tension-Only Yielding Dampers," Oregon State University, 2003.
24. Randy Scott, M.S. (dual-major), "Lateral Force Resisting Pathways in Log Structures," Oregon State University, 2003.
25. James Newell, M.S., "Steel Confined Yielding Damper for Earthquake Resistant Design," Oregon State University, 2003.
26. Claudia Eiden, M.S. (dual-major), "Nonlinear Dynamic Analysis of Heavy Timber Frame Structures Including Passive Damping Devices," Oregon State University, 2003.
27. Han, Seung Ryong, Ph.D., "Estimating Hurricane Outage and Damage Risk in Power Distribution Systems," Texas A&M University, 2008.
28. Huang, Qindan, Ph.D., "Adaptive Reliability Analysis of Reinforced Concrete Bridges Using Nondesdestructive Testing," Texas A&M University, 2010.
29. Attary, Navid, Ph.D., "Development and Application of Negative Stiffness Device for Seismic Responses Control of Highway Bridge Structures," Rensselaer Polytechnic Institute, 2013.
30. Tian, Jingjing, Ph.D., "Seismic Retrofit of Soft-Story Woodframe Buildings via Damping and Stiffness Modification," Rensselaer Polytechnic Institute, 2014.

*Post-Baccalaureate Trainees:*

1. Rainer Stahl, Diplome Student (Structural Engineering), University of Karlsruhe, co-advised with R. Leichti, OSU, 2001.

*Doctoral Examiner:*

1. Mohammad R. Moarefzadeh, Ph.D., "Time-Dependent Reliability Analysis of Offshore Structures," Department of Civil Engineering and Surveying, University of Newcastle, NSW, Australia, 1995.
2. Nasser Bin Hossain, Ph.D., "Time-Dependent Deflections, Serviceability Reliability and Expected Costs of Unserviceability for Reinforced Concrete Flexural Beams," Department of Civil Engineering and Surveying, University of Newcastle, NSW, Australia, 2000.

*Post-Doctoral Researcher and Visiting Scholar Sponsorship:*

1. Dr. Mark G. Stewart (University of Newcastle, Australia), Visiting Research Associate, Clemson University, August 1996 - February 1997.
2. Dr. Zhigang Huang, Post-Doctoral Researcher, Clemson University, June 1999 - September 1999. [Currently chief risk officer, CIG Reinsurance, Bermuda]
3. Dr. Mark G. Stewart (University of Newcastle, Australia), Visiting Research Scientist, Oregon State University, July 2000 - December 2000.
4. Dr. Kyung Ho Lee, Post-Doctoral Researcher, Texas A&M University, November 2004 - December 2005. [Currently senior research engineer with Energo Corp., Houston, TX]
5. Dr. Weichiang Pang, Post-Doctoral Researcher, Texas A&M University, February 2005 - August 2008. [Currently Assistant Professor of Civil Engineering, Clemson University]
6. Dr. Mauricio Sanchez-Silva, Post-Doctoral Researcher (Visiting Professor), Texas A&M University, January 2006 - December 2008. [Currently Associate Professor of Civil Engineering, Universidad de Los Andes, Bogota, Columbia]
7. Dr. Wang Yue, Post-Doctoral Researcher, Rensselaer Polytechnic Institute, February 2010 - December 2013; The University of Vermont, January 2014 - present.
8. Dr. Frank Lombardo, Post-Doctoral Researcher/Visiting Assistant Professor (jointly supervised with Chris Letchford), Rensselaer Polytechnic Institute, 2012-2015. [Currently Assistant Professor of Civil Engineering, University of Illinois at Urbana-Champaign]







23. Fridley, K.J. and Rosowsky, D.V. (1995), "Service Load Behavior and Design of Wood Joist Floors,"

40. Fridley, K.J., Rosowsky, D.V. and Hong, P. (1997), "Time-Dependent Service Load Behavior of Wood Floors: Analytical Model," *Computers and Structures*, 66(6):847-860.
41. Reed, T., Rosowsky, D. and Schiff, S. (1997), "Uplift Capacity of Light-Frame Rafter to Top-Plate Connections," *Journal of Architectural Engineering*, ASCE, 3(4):156-163.
42. Stewart, M.G. and Rosowsky, D.V. (1998), "Time-Dependent Reliability of Deteriorating Reinforced Concrete Bridge Decks," *Structural Safety*, 20:91-109.
43. Kothekar, A.V., Rosowsky, D.V. and Huston, D.R. (1998), "Investigation of the Adequacy of Vertical Design Loads for Shoring," *Journal of Performance of Constructed Facilities*, ASCE, 12(1):41-47.
- 44.



58. Rosowsky, D.V., Stewart, M.G., and Khor, E.H. (2000), "Early-Age Loading and Long-Term Deflections of Reinforced Concrete Beams," *ACI Structural Journal*, 97(3):517-524, May-June.
59. Huang, Z., Rosowsky, D.V. and Sparks, P.R. (2000), "Hurricane Hazard Assessment System for Damage to Residential Structures in South Carolina," *Environmental Geosciences*, 7(1):57-65.
60. Juang, C.H., Chen, C.J., Tang, W.H. and Rosowsky, D.V. (2000<sup>4</sup>), "CPT-Based Liquefaction Analysis, Part I: Determination of Limit State Function" *Geotechnique*, 50(5):583-592.
61. Juang, C.H., Chen, C.J., Rosowsky, D.V. and Tang, W.H. (2000<sup>3</sup>), "CPT-Based Liquefaction Analysis, Part II: Reliability and Design" *Geotechnique*, 50(5):593-599.
62. Epaarachchi, D.C., Stewart, M.G. and Rosowsky, D.V. (2000), "Design, Workmanship and System Risk of Multi-story Buildings During Construction," *Australian Journal of Structural Engineering*, IEAust, 3(1-2):43-54.
63. Huang, Z. and Rosowsky, D.V. (2000), "Analysis of Hurricane Directionality Effects Using Event-Based Simulation," *Wind & Structures*, 3(3):177-191.
64. Huang, Z., Rosowsky, D.V. and Sparks, P.R. (2001), "Hurricane Simulation Techniques for the Evaluation of Wind Speeds and Expected Insurance Losses," *Journal of Wind Engineering and Industrial Aerodynamics*, 89:605-617.
65. Rosowsky, D.V., Huang, Z. and Sparks, P.R. (2001), "Long-term Hurricane Risk Assessment and Expected Damage to Residential Structures" *Reliability Engineering and System Safety*, 74:239-249.
66. Rosowsky, D.V. and Schiff, S.D. (2001), "Mismatched Expectations, Objectives, and Performance Requirements for Wood-Frame Construction in High-Wind Regions," *Wood Design Focus*, 11(2):13-16.
67. Rosowsky, D.V. and Schiff, S.D. (2001), "Performance of Wood-Frame Structures Under High Wind Loads," *Wood Design Focus*, 11(1):14-18.
68. Khor, E.H., Rosowsky, D.V. and Stewart, M.G. (2001), "Probabilistic Analysis of Time-Dependent Deflections of RC Flexural Members," *Computers and Structures*, 79(16):1461-1472.
69. Rosowsky, D.V. and Stewart, M.G. (2001), "Probabilistic Construction Load Model for Multistory Reinforced Concrete Buildings," *ASCE Journal of Performance of Constructed Facilities*, 15(4):145-152.
70. Epaarachchi, D.C., Stewart, M.G. and Rosowsky, D.V. (2002), "Structural Reliability of Multistory Buildings During Construction," *ASCE Journal of Structural Engineering*, 128(2):205-213.
71. Rosowsky, D.V. and Bulleit, W.M. (2002), "Another Look at Load Duration Effects in Wood," *ASCE Journal of Structural Engineering*, 128(6):824-828.
72. Rosowsky, D.V. and Ellingwood, B.R. (2002), "Performance-Based Engineering of Wood Frame Housing: a Fragility Analysis Methodology," *ASCE Journal of Structural Engineering*, 128(1):32-38.
73. Stewart, M.G., Rosowsky, D.V. and Val, D.V. (2002), "Reliability-based Bridge Assessment Using Risk-Ranking Decision Analysis," *Structural Safety*, 23:397-405.
74. Rosowsky, D.V. and Bulleit, W.M. (2002), "Load Duration Effects in Wood Members and Connections: Order Statistics and Critical Loads," *Structural Safety*, 24:347-362.

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<sup>3</sup> Winner of 2000 T.K. Hsieh Award presented by the Society for Earthquake and Civil Engineering Dynamics, of the Institution of Civil Engineers (UK), for "the best paper published by the Institution in the field of structural and soil vibrations caused by seismic effects".

75. Cai, Z., Fridley, K.J., Hunt, M.O. and Rosowsky, D.V. (2002), "Creep and Creep-Recovery Models for Wood Under High Stress Levels," *Wood and Fiber Science*, 34(3):425–433.
76. Reinhold, T.A., Schiff, S.D., Rosowsky, D.V. and Sill, B.L. (2002), "The Case for Enhanced In-Home Protection from Severe Winds," *ASCE Journal of Architectural Engineering*, 8(2):60-68.
77. Rosowsky, D.V. (2002), "Reliability-Based Seismic Design of Wood Shearwalls," *ASCE Journal of Structural Engineering*, 128(11):1439-1453.
78. Rosowsky, D.V. (2002), "Performance of Timber Buildings Under High Wind Loads," *Progress in Structural Engineering and Materials*, 4(3):286-290.
79. Stewart, M.G., Rosowsky, D.V. and Huang, Z. (2003), "Hurricane Risks and Economic Viability of Strengthened Construction," *ASCE Natural Hazards Review*, 4(1):12-19.
80. Davidson, R.A., Liu, H., Sarpong, I.K., Sparks, P. and Rosowsky, D.V. (2003), "Electric Power Distribution System Performance in Carolina Hurricanes," *ASCE Natural Hazards Review*, 4(1):36-45.
81. Rosowsky, D.V., Walsh, T.G. and Crandell, J.H. (2003), "Reliability of Residential Woodframe Construction from 1900-to-Present," *Forest Products Journal*, 53(4):19-28.
82. Rosowsky, D. and Schiff, S. (2003), "What Are Our Expectations, Objectives, and Performance Requirements for Wood Structures in High Wind Regions?," *Natural Hazards Review*, 4(3):144-148.
83. Kent, S.M., Leichti, R.M., Rosowsky, D.V. and Morrell, J.J. (2004), "The Effects of Wood Decay by *Postia placenta* on the Lateral Capacity of Nailed Oriented Strand Board Sheathing and Douglas-fir Lumber," *Wood and Fiber Science*, 36(4):560-572.
84. Ellingwood, B.R., Rosowsky, D.V., Li, Y. and Kim, J.H. (2004), "Fragility Assessment of Light-Frame Wood Construction Subjected to Wind and Earthquake Hazards," *ASCE Journal of Structural Engineering*, 130(12):1921-1930.
85. Rosowsky, D.V. and Yu, G. (2004), "Partial Factor Approach to Repetitive-



109. Anderson, E.N., Leichti, R.J., Sutt, E.G. and Rosowsky, D.V. (2007<sup>4</sup>), "Sheathing Nail Bend-Yield Strength: Effect on Cyclic Performance of Wood Shearwalls," *Wood and Fiber Science*, 39(4):536-547.
110. Choe, D., Gardoni, P., Rosowsky, D. and Haukaas, T. (2007), "Probabilistic Capacity Models and Seismic Fragility Estimates for RC Columns Subject to Corrosion," *Reliability Engineering & System Safety*

126. Choe, D.E., Gardoni, P. and Rosowsky, D. (2009), "Fragility Increment Functions for Deteriorating Reinforced Concrete Bridge Columns," *ASCE Journal of Engineering Mechanics*, 136(8):969-978.
127. van de Lindt, J.W., Rosowsky, D.V., Pei, S. and Pang, W. (2009), "Objectives of the NEESWood Capstone Test: Six-Story Light-Frame Seismic Construction using PBSB," *Wood Design Focus*, Vol. 19.
128. Pang, W., Rosowsky, D.V., Pei, S. and van de Lindt, J.W. (2010), "Simplified Direct Displacement Design of Six-Story Woodframe Building and Pretest Seismic Performance Assessment," *ASCE Journal of Structural Engineering*, 136(7):813-825.
129. Wang, Y., Rosowsky, D.V. and Pang, W. (2010), "Toward a Performance-Based Procedure for Direct Displacement Design of Engineered Woodframe Structures," *ASCE Journal of Structural Engineering*, 136(8):978-988.
130. Pang, W. and Rosowsky, D.V. (2010), "Semi-rigid Diaphragm and Shear Wall Deflections: Beam-Spring Analog Model," *Structures and Bridges*, 163(4):227-244.
131. Gomez, C., Sanchez-Silva, M., Duenas-Osorio, L. and Rosowsky, D. (2011), "Hierarchical Infrastructure Network Representation Methods for Risk-Based Decision Making," *Structure and Infrastructure Engineering*, 2011:1-15.
132. Gardoni, P. and Rosowsky, D.V. (2011), "Seismic Fragility Increment Functions for Deteriorating Reinforced Concrete Bridges," *Structure and Infrastructure Engineering*, 7(11):869-879.



**Book chapters and Monographs:**

1. Rosowsky, D.V., "Structural Reliability," Chapter 49, *Civil Engineering Handbook*, ed. by W.F. Chen, CRC Press, Boca Raton, FL, 1995, pp. 1773-1805.
2. Rosowsky, D.V., "Structural Reliability," Chapter 26, *Structural Engineering Handbook*, ed. by W.F. Chen, CRC Press, Boca Raton, FL, 1997, 26:1-39.
3. *Residential Building Loads: Review and Roadmap for the Future* (J.H. Crandell, T.M. Kenney, and D. V Rosowsky, Editors), 2006, prepared by ASCE Structural Engineering Institute (SEI) with support from the National Association of Home Builders and the U.S. Department of Housing and Urban Development, American Society of Civil Engineers, Reston, VA, 50 pp.

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**BOARD SERVICE:**

- Board of Directors, Vermont Center for Emerging Technologies, 2017-present
- Board of Directors, Vermont Youth Orchestra Association, invitation to join 2019
- Board of Advisors, Tufts University, School of Engineering, 2008-present

**HONORS, AND AWARDS:**

- Elected to the grade of Fellow, Structural Engineering Institute (SEI), October 2014.
- Elected to grade of Fellow, American Society of Civil Engineers (ASCE), October 2007.
- Outstanding Career Achievement Award, Tufts University Graduate School, 2007.
- Outstanding Alumni Achievement Award, Department of Civil and Environmental Engineering, Tufts University, 2005.
- Holder of the A.P. and Florence Wiley Chair in Civil Engineering, Texas A&M University, 2004-2009.
- Erksine Fellow, University of Canterbury, Christchurch, New Zealand, April-May, 2004.
- 2001 ASCE **Walter L. Huber Civil Engineering Research Prize**, "*for his research on stochastic modeling of behavior of engineered wood construction subject to natural and man-made hazards, and development of practical risk-consistent criteria for design of wood structures.*"
- 2001 Institution of Civil Engineers **T.K. Hsieh Award** (with C.H. Juang and W.K. Tang) for "*the best paper published by the Institution in the field of structural and soil vibrations caused by seismic effects.*" Title of papers: "CPT-based Liquefaction Analysis, I: Determination of Limit State Function, and II: Reliability and Design"
- Inaugural holder of Richardson Chair in Wood Engineering, Oregon State University, appointed July 2000.
- Clemson University Board of Trustees Award for Faculty Excellence, May 1999.
- Nominated for Forest Products Society (FPS) Young Engineer Award, 1999.
- 1998 ASCE **Norman Medal** (with B.R. Ellingwood) to "*the authors of a paper that is judged worthy of special commendation for its merit as a contribution to engineering science.*" Title of paper: *Combining Snow and Earthquake Loads for Limit States Design*, Journal of Structural Engineering, November 1996.
- Clemson University Board of Trustees Award for Faculty Excellence, May 1998.
- DOW Outstanding New Faculty Award, American Society for Engineering Education (ASEE), Southeast Section, June 1997.
- Nominated for Quattlebaum 7(g)6( )-2(E)-2(d)-5(u)65(u)6(c/F6 9.96.F 792 -5r612 792 reW\$ Tm0 g0 G[(-)] TJETQqETQqLi.0

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Fellow, Structural Engineering Institute (SEI)  
Member, American Association for the Advancement of Science (AAAS)  
Member, American Society for Engineering Education (ASEE)  
Member, Chi Epsilon, Civil Engineering Honor Society  
Member, Sigma Xi, Scientific Research Society

**PERSONAL:**

Born June 15, 1963, Boston, Massachusetts  
Married (Michelle) with two children (Melissa and Leo)

**REFERENCES AVAILABLE UPON REQUEST**