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Tracy Kijewski-Correa is Linbeck Associate Professor of the Department of Civil Engineering and Geological Sciences at the University of Notre Dame and fellow of the Kellogg Institute for International Studies. She leads the Structural DYNAMics And MONitoring (DYNAMO) Laboratory, which is dedicated to addressing 21st Century Civil Infrastructure Challenges posed by increased urbanization and hazard vulnerability, using inter-disciplinary collaborations and context-driven technologies ranging from advanced sensing, simulation and cyber-infrastructure to innovative sustainable systems suitable for developed and developing countries. These efforts include an NSF-funded, full-scale monitoring program for signature buildings in three countries around the globe, including the world's tallest building, Burj Khalifa, allowing systematic validation of the design process for tall buildings and assumptions governing their dynamic properties and impacts on habitability performance. Other activities include research in cyber-physical systems and embedded sensing, in collaboration with a multi-disciplinary, college-wide research team focused on wireless sensor networks for detection of damage in civil infrastructure and terrorist activities in major cities. Of most relevance to the center are Dr. Kijewski-Correa's two recent NSF-funded cyber-infrastructure projects. VORTEX-Winds: A Virtual Organization for Reducing the Toll of EXtreme Winds was one of the first Engineering Virtual Organizations (EVOs) and the Cyber-Enabled Discovery and Innovation (CDI Type II) program to develop OSD-CI: Open Sourcing the Design of Civil Infrastructure, a project that creates new paradigms for cyber-collaboration and crowd-sourcing of engineering tasks. Recently, these efforts have been extended by Notre Dame's Strategic Research Initiatives Program to include the seeding of CYBER-EYE: A Cyber-Collaboratory for National Risk Modeling and Assessment to Mitigate the Impacts of Hurricanes in a Changing Climate. These efforts have now motivated Dr. Kijewski-Correa to explore how networks of citizen "sensors" and citizen engineers can be used to create a scalable paradigm for natural hazard mitigation, post-disaster response, and distributed sensing of infrastructure to enhance societal resilience, as well as how personal networks of VO participants and crowds can be used to enhance disaster risk reduction.

Dr. Kijewski-Correa's scholarship has focused increasingly on Natural Hazards Mitigation and is now being extended to the developing world. This began with her founding of an NSF-funded REU site to allow undergraduates to work on sustainable and culturally appropriate housing designs in the wake of the 2004 Boxing Day Tsunami, including conducting three years of field reconnaissance and recovery evaluation in Thailand and Indonesia. Her most prominent work now focuses on the master planning and rebuilding of Leogane, Haiti, the effective epicenter of the 2010 Earthquake. To this end, she and her collaborators have conducted numerous reconnaissance trips following the earthquake and are currently engaged in development of a sustainable model for low-income housing, funded by the National Collegiate Inventors Association and the Kellogg Institute for International Studies under the banner of Engineering2Empower (E2E). These efforts are now being leveraged to develop community-based Disaster Risk Reduction strategies enabled by mobile devices with target applications in Latin America and The Caribbean (LAC). This project and another effort she advises, ND SEED: Notre Dame Students Empowering Engineering Development, allows students to engage in service-based research and scholarship to help deliver critical infrastructure to developing countries in LAC.

In addition to the ND SEED service course and the opportunities for undergraduate research as part of E2E and the Center for Undergraduate Scholarly Engagement, Dr. Kijewski-Correa has

offered 4 courses in Structural Engineering at the junior, senior and graduate levels. She also developed the first module for the College's first year engineering course that emphasizes experiential learning and interdisciplinary team environments to demonstrate universal engineering principles related to modeling, reliability and optimization using K'Nex towers using experimentally validated SAP models.

Education

Ph.D. Civil Engineering, University of Notre Dame, May 2003

Dissertation Title: "Time-Frequency Perspectives in System Identification: From Theory to Full-Scale Measurements"

M.S. Civil Engineering, University of Notre Dame, August 2000

Thesis Title: "Dynamic Wind Effects on Structures: Response and Mitigation for Tall Buildings"

B.S. Civil Engineering, University of Notre Dame, Magna Cum Laude, May 1997

Relevant Experience

All appointments in the department of Civil and Environmental Engineering and Earth Sciences, formerly the Department of Civil Engineering and Geological Sciences, University of Notre Dame

2/09 – present	Linbeck Associate Professor
9/11 – present	Faculty Fellow, Kellogg Institute for International Studies
9/11 – present	Associated Faculty, Center for Undergraduate Scholarly Engagement
2/09 – 8/11	Associate Department Chair
8/08 – 01/09	Associate Professor
8/03 – 7/08	Assistant Professor/Phillip B. Rooney Chair
6/03 – 8/03	Visiting Assistant Professor

Research Interests

- Structural Dynamics and Health Monitoring
- Natural Hazard Assessment and Mitigation
- Performance of Tall Buildings
- Citizen Engineering through Virtual Organizations and Cyberinfrastructure
- Engineering Development

Distinctions, Honors, Awards

- **Keynote Address**, "Empowering Sustainable Reconstruction of the Residential Sector Following the 2010 Haitian Earthquake," CONSTRUCT Conference, Phoenix, AZ, September 12, 2102.
- **2012 TK Hsieh Award**, Institution of Civil Engineers for "Wind-Induced Vibrations of Buildings: Role of Transient Events," *Proceedings of the ICE, Structures and Buildings*, 164(4): 273-284.
- **2010 International Association for Wind Engineering (IAWE) Junior Award** for record of outstanding achievement, within the previous five-year period for significant and original contributions to wind engineering research and applications to wind engineering practice

- **2008 ASCE State-of-the-Art in Civil Engineering** Award for “Validating the Wind-Induced Response of Tall Buildings: A Synopsis of the Chicago Full-Scale Monitoring Program,” *Journal of Structural Engineering*, ASCE, **132**(10): 1509-1523.
- **2005 Richard D. Marshall Student Award** for best doctoral thesis in wind engineering related to experimental methods, American Association for Wind Engineering
- **2000 Skidmore, Owings & Merrill Traveling Fellowship in Structural Engineering**
- **National Defense Science and Engineering Graduate Fellowship** (1997-2000)
- **National Science Foundation Graduate Research Trainee Fellowship** (1998-2000)
- **Eli J. and Helen Shaheen Graduate School Award in Engineering**, University of Notre Dame, for exemplary research and teaching (2003)
- Fellowship, Center for Applied Mathematics, University of Notre Dame (1999-2000, 2000-2001)
- Scholarship, Danish Technical University International Graduate Research School (1999)
- Manchester Who’s Who (2004)
- Member, Tau Beta Pi
- Member, Chi Epsilon
- Kaneb Center for Teaching and Learning: Outstanding Graduate Student Teacher Award for Excellence in Teaching (2000)
- Dondanville Family Graduate Award for Excellence in Teaching by a Graduate Student (1999)

Professional Memberships & Service

- Co-Chair, 2012 Joint Conference of the Engineering Mechanics Institute & 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability
- Chair, Communications Committee, Board of Governors, Engineering Mechanics Institute
- Tall Buildings Committee, ASCE
 - Chair (2012 – present)
 - Secretary (2003-2012)
 - Chair, Sub-Committee on Full-Scale Monitoring of Tall Buildings
 - Secretary, Sub-Committee on Occupant Comfort
- Structural Identification of Constructed Facilities Committee, ASCE (2009-Present)
 - Vice Chair (2012 – present)
 - Monograph Editor, Chapter Coordinator: Building Applications
- Associate Editor, ASCE, *Journal of Structural Engineering*
- American Society of Civil Engineers, Associate Member
- Structural Engineering Institute, ASCE, Member
- Earthquake Engineering Research Institute, Member
- American Association for Wind Engineering, Member
- American Institute of Steel Construction, Educator Member
- Council on Tall Buildings and Urban Habitat, Member
- Reviewer Activities:

- Journals: *ASCE Journal of Structural Engineering*, *Journal of Wind Engineering and Industrial Aerodynamics*, *Wind and Structures*, *ASCE Journal of Engineering Mechanics*, *Earthquake Engineering and Structural Dynamics*, *Journal of Sound and Vibration*, *Structural Safety*, *IEEE Transactions on Control Systems Technology*, *Computer-Aided Civil and Infrastructure Engineering*, *Measurement and Science Technology*, *Smart Materials and Structures*, *Journal of Structural Control and Monitoring*, *Structural Health Monitoring: An International Journal*, *Structure and Infrastructure Engineering*
- NSF International Research Fellows Program
- NSF CMS/CMMI Division, Structural Systems and Hazard Mitigation of Structures Program

Books and Monographs

Monographs:

1. Catbas, F.N., **Kijewski-Correa, T.**, Aktan, A.E., Eds. (2012) *Structural Identification of Constructed Facilities: Approaches, Methods, and Technologies for Effective Practice of St-id*, Amer Society of Civil Engineers, ISBN-10: 0784411972, ISBN-13: 978-0784411971.

Chapters:

1. **Kijewski, T.**, Haan, F. and Kareem, A. (2001). "Wind-Induced Vibrations," In: Braun, S.G., Ewins, D.J. and Rao, S.S., eds., *Encyclopedia of Vibration*, Academic Press: 1578-1587.
2. Kareem, A., Tognarelli, M.A., Gurley, K.R. and **Kijewski, T.L.** (1997). "Modeling of Nonlinear Ocean Systems," In: Shlesinger, M.F. and Swain, T., eds., *Stochastically Excited Nonlinear Ocean Structures*, World Scientific: 79-104.

Reviews:

1. **Kijewski-Correa, T.** (2005). "Advances in Smart Technologies in Structural Engineering (Holnicki-Szulc, C.A. Mota Soares, Eds.)," *IEEE Transactions on Automatic Control*, **50** (11): 1917-1918.

Technical Magazine Articles:

1. Kijewski-Correa, T. (2009), "Full-Scale Monitoring: Three Lessons from a Chicago Program," *STRUCTURE Magazine*, November: 14-17.
2. **Kijewski-Correa, T.** and Kareem, A. (2003), "The Height of Precision," *GPS World*, **14**(9): 20-34.

Refereed Journal Articles (Advised Student Underlined)

1. **Kijewski-Correa, T.**, Smith, N., LaBarge, J., Taflanidis, A., Krusche, M., Liu, C., Vardeman, C., Kennedy, A. (2013) "CYBER-EYE: Development of Integrated Cyber-Infrastructure to Support Rapid Hurricane Risk Assessment," *Journal of Wind Engineering and Industrial Aerodynamics, Special Issue: Americas Conference on Wind Engineering, Invited Papers*, In Review.

2. **Kijewski-Correa, T.**, A. Kareem, Y.L., Guo, Y.L., Bashor, R., and Weigand, T. (2013), "Performance of Tall Buildings in Urban Zones: Lessons Learned from a Decade of Full-Scale Monitoring," *International Journal of High Rise Buildings*, 2(3): 179-192.
3. Catbas, F.N. and **Kijewski-Correa, T.**, (2013) "Structural Identification of Constructed Systems: A Collective Effort Toward an Integrated Approach that Reduces Barriers to Adoption," *Journal of Structural Engineering, Special Issue: Real-World Applications for Structural Identification and Health Monitoring Methodologies*, ASCE, 139(10): 1648-1652.
4. **Kijewski-Correa, T.**, Kwon, D., Kareem, A., Bentz, A., Guo, Y., Bobby, S., and Abdelrazaq, A. (2013). "SmartSync: An Integrated Real-Time Structural Health Monitoring and Structural Identification System for Tall Buildings." *Journal of Structural Engineering, Special Issue: Real-World Applications for Structural Identification and Health Monitoring Methodologies*, 139(10): 1675–1687.
5. Bashor, B., Bobby, S., **Kijewski-Correa, T.** and Kareem, A. (2012) "Full-Scale performance evaluation of tall buildings under wind," 13th ICWE Special Issue, Invited Paper, *Journal of Wind Engineering & Industrial Aerodynamics*, 104-106: 88-97.
6. **Kijewski-Correa, T.**, Taflanidis, A.A., Mix, D. and Kavanagh, R. (2012) "An Empowerment Model for Sustainable Residential Construction in Léogâne, Haiti after the January 2010 Earthquake," *ASCE Leadership and Management in Engineering, Special Issue on Large-Scale Disasters: What We Have Learned, What We Can Do*, OctoberL 271-287.
7. *Bentz, A. and **Kijewski-Correa, T.** (2011) "Wind-Induced Vibrations of Buildings: Role of Transient Events," *Proceedings of the ICE, Structures and Buildings*, 164(4): 273-284.
8. **Kijewski-Correa, T.** and Taflanidis, A.A. (2011) "The Haitian Housing Dilemma: Can Sustainability and Hazard-Resilience Be Achieved," *Bulletin of Earthquake Engineering*, November 10: 1-7.
9. Mix, D., **Kijewski-Correa, T.** and Taflanidis, A.A. (2011) "Assessment of Residential Housing in Léogâne, Haiti after the January 2010 Earthquake and Identification of Needs for Rebuilding," *EERI Earthquake Spectra*, 27(S1):S299-S322.
10. **Kijewski-Correa, T.** and Su, S. (2009) "BRAIN: A Bivariate Data-Driven Approach to Damage Detection in Multi-Scale Wireless Sensor Networks," *Smart Structures and Systems*, 5(4): 415-426.
11. Kwon, D.K., **Kijewski-Correa, T.** and Kareem, A. (2008), "e-Analysis of High-Rise Buildings Subjected to Wind Loads," *Journal of Structural Engineering*, ASCE, 134(7): 1139-1153.
12. **Kijewski-Correa, T.** and Pirnia, J.D. (2007), "Dynamic Behavior of Tall Buildings Under Wind: Insights from Full-Scale Monitoring," *The Structural Design of Tall and Special Buildings*, 16, 471-486.
13. **Kijewski-Correa, T.** and Kochly, M. (2007), "Monitoring the Wind-Induced Response of Tall Buildings: GPS Performance and the Issue of Multipath Effects," *Journal of Wind Engineering and Industrial Aerodynamics*, 95(9-11): 1176-1198.
14. **Kijewski-Correa, T.** and Kareem, A. (2007), "Performance of Wavelet Transform and Empirical Mode Decomposition in Extracting Signals Embedded in Noise," *Journal of Engineering Mechanics*, ASCE, 133(7): 849-852.

* Winner of TK Hsieh Award

15. **Kijewski-Correa, T.** and Kareem, A. (2007), "Nonlinear Signal Analysis: Time-Frequency Perspectives," *Journal of Engineering Mechanics*, ASCE, **133**(2): 238-245.
16. ***Kijewski-Correa, T.**, Kilpatrick, J., Kareem, A., Kwon, D.K., Bashor, R., Kochly, M., Young, B.S., Abdelrazaq, A., Galsworthy, J., Isyumov, N., Morrish, D., Sinn, R.C. and Baker, W.F. (2006), "Validating the Wind-Induced Response of Tall Buildings: A Synopsis of the Chicago Full-Scale Monitoring Program," *Journal of Structural Engineering*, ASCE, **132**(10): 1509-1523.
17. **Kijewski-Correa, T.** and Kareem, A. (2006), "Efficacy of Hilbert and Wavelet Transforms for Time-Frequency Analysis," *Journal of Engineering Mechanics*, ASCE, **132**(10): 1037-1049.
18. **Kijewski-Correa, T.**, Kareem, A. and Kochly, M. (2006) "Experimental Verification and Full-Scale Deployment of Global Positioning Systems to Monitor the Dynamic Response of Tall Buildings," *Journal of Structural Engineering*, ASCE, **132**(8): 1242-1253.
19. **Kijewski-Correa, T.** (2005), "GPS: A New Tool for Structural Displacement Measurement," *APT Bulletin*, **36**(1): 13-18.
20. Gurley, K., **Kijewski, T.** and Kareem, A. (2003), "First- and Higher-Order Correlation Detection Using Wavelet Transforms," *Journal of Engineering Mechanics*, ASCE, **129**(2): 188-201.
21. **Kijewski, T.** and Kareem, A. (2003), "Wavelet Transforms for System Identification: Considerations for Civil Engineering Applications," *Computer-Aided Civil and Infrastructure Engineering*, **18**: 341-357.
22. Zhou, Y., **Kijewski, T.** and Kareem, A. (2003), "Aerodynamic Loads on Tall Buildings: An Interactive Database," *Journal of Structural Engineering*, ASCE, **129**(3): 394-404.
23. Kareem, A. and **Kijewski, T.** (2002), "Time-Frequency Analysis of Wind Effects on Structures," *Journal of Wind Engineering and Industrial Aerodynamics*, **90** (12-15): 1435-1452.
24. **Kijewski, T.** and Kareem, A. (2002), "On the Reliability of a Class of System Identification Techniques: Insights from Bootstrap Theory," *Structural Safety*, **24**(2-4): 261-280.
25. Zhou, Y., **Kijewski, T.** and Kareem, A. (2002), "Alongwind Load Effects on Tall Buildings: A Comparative Study of Major International Codes and Standards," *Journal of Structural Engineering*, ASCE, **128**(6): 788-796.
26. **Kijewski, T.** and Kareem, A. (2002), "On the Presence of End Effects and Associated Remedies for Wavelet-Based Analysis," *Journal of Sound and Vibration*, **256**(5): 980-988.
27. Kareem, A. and **Kijewski, T.** (2001), "Probabilistic and Statistical Approaches for Wind Effects: Time-Frequency Perspectives," *Journal of Wind Engineering (JAPAN)*, **89**: 25-30.
28. Kareem, A., **Kijewski, T.** and Smith, C.E. (1999), "Analysis and Performance of Offshore Platforms in Hurricanes," *Wind and Structures* **2**(1): 1-23.
29. Kareem, A., **Kijewski, T.** and Tamura, Y. (1999), "Mitigation of Motion of Tall Buildings with Recent Applications," *Wind and Structures* **2**(3): 201-251.

* Winner of 2008 ASCE State-of-the-Art in Civil Engineering Award

30. **Kijewski, T.** and Kareem, A. (1998), "Dynamic Wind Effects: A Comparative Study of Provisions in Codes and Standards with Wind Tunnel Data," *Wind and Structures* 1(1): 77-109.
31. Kareem, A., **Kijewski, T.** and Lu, P.C. (1998), "Investigation of Interference Effects for a Group of Finite Cylinders," *Journal of Wind Engineering and Industrial Aerodynamics* 77-78: 503-520.
32. Kareem, A. and **Kijewski, T.** (1996), "7th US National Conference on Wind Engineering: A Summary of Papers," *Journal of Wind Engineering and Industrial Aerodynamics* 62: 81-129.

Referred Conference Publications

1. Zhai, Z., **Kijewski-Correa, T.**, Hachen, and Madey, G. (2012) "Haiti Earthquake Photo Tagging: Lessons on Crowdsourcing In-Depth Image Classifications," *Proceedings of 7th International Conference on Digital Information Management (ICDIM 2012)*, Aug 22-24, Macau, China.
2. Zhai, Z., **Kijewski-Correa, T.**, Kareem, A., Hachen, D., and Madey, G. "Citizen Engineering: Evolving OSS Practices to Engineering Design and Analysis," *Proceedings of 8th International Conference on Open Source Systems, IFIP Advances in Information and Communication Technology*, 0378: 61-77.
3. Zhai, Z., Hachen, D., **Kijewski-Correa, T.** Shen, F. and Madey, G. (2012) "Citizen Engineering: Methods for 'Crowdsourcing' Highly Trustworthy Results," *Proceedings 45th Hawaii International Conference on System Sciences*, January 4-7, Maui, Hawaii: 3406-3415.
4. **Kijewski-Correa, T.**, Su, S. and Montestruque, L. (2012) "A Citizen-Centric Health Monitoring Paradigm Using Embedded Self-Locating Wireless Sensor Networks," *Proceedings of Structures Congress 2012, 20th Analysis and Computation Specialty Track*, March 29-31, Chicago.
5. Bentz, A. and **Kijewski-Correa, T.** (2012) "Finite Element Modeling of Tall Buildings: The Importance of Considering Foundation Systems for Lateral Stiffness," *Proceedings of Structures Congress 2012, 20th Analysis and Computation Specialty Track*, March 29-31, Chicago.
6. Bentz, A. and **Kijewski-Correa, T.** (2008) "Predictive Models for Damping in Buildings: The Role of Structural System Characteristics," *Proceedings of 2008 Structures Congress, 18th Analysis and Computation Specialty Conference*, Vancouver, Canada.
7. **Kijewski-Correa, T.**, Haenggi, M. and Antsaklis, P. (2006) "Wireless Sensor Networks for Structural Health Monitoring: A Multi-Scale Approach," *Proceedings of 2006 ASCE Structures Congress, 17th Analysis and Computation Specialty Conference*, May 18-21, St. Louis. (Presenter)
8. Gurley, K., **Kijewski, T.** and Kareem, A. (2001), "Higher Order Correlation Detection in Nonlinear Aerodynamic Systems Using Wavelet Transforms," *Proceedings of International Conference on Structural Safety and Reliability*, Newport Beach, CA, June.
9. **Kijewski, T.** and Kareem, A. (2001), "On the Reliability of System Identification: Applications of Bootstrap Theory," *Proceedings of International Conference on Structural Safety and Reliability*, Newport Beach, CA, June. (Presenter)
10. **Kijewski, T.** and Kareem, A. (1999), "Analysis of Full-Scale Data from a Tall Building in Boston: Damping Estimates," *Proceedings of 10th International Conference on Wind Engineering*, Copenhagen, June. (Presenter)

Unrefereed Publications (Advised Student Underlined)

1. Weigand, T. and **Kijewski-Correa, T.** "Data Mining to Support Long-Term Monitoring Programs: Case Studies for Tall Buildings in Boston and Chicago," (2014) *Structures Congress*, Boston, MA., April 3-5.
2. Kijewski-Correa, T., Kwon, D.-K., Kareem, A. (2014) "Burj Khalifa: A Case Study in Client-Driven, Flexible Architectures for Long-Term Building Monitoring," (2014) *Structures Congress*, Boston, MA., April 3-5.
3. **Kijewski-Correa, T.** "The Tower Builder: Adapting Universal Principles from Structural Engineering for Experiential Learning Among First Year Engineering Students," (2014) *Structures Congress*, Boston, MA., April 3-5.
4. LaBarge, J. and **Kijewski-Correa, T.** (2013) "Rapid Infrastructure Digitization Framework to Support High-Fidelity Hurricane Risk Assessment," *Proceedings of 12th Americas Conference on Wind Engineering*, Seattle, June 16-20. (Poster)
5. Weigand, T. and **Kijewski-Correa, T.** (2013), "Automated Assessment of Tall Building Wind-Induced Response Data to Support Long-Term Monitoring Programs," *Proceedings of 12th Americas Conference on Wind Engineering*, Seattle, June 16-20.
6. **Kijewski-Correa, T.**, Taflanidis, A., Kennedy, A., Fernando, H.J.S., Kareem, A., Khandelwal, K. and Westerink, J. (2013) "CYBER-EYE: Development of Integrated Cyber-Infrastructure to Support Rapid Hurricane Risk-Assessment," *Proceedings of 12th Americas Conference on Wind Engineering*, Seattle, June 16-20.
7. Williams, S., Bentz, A. and **Kijewski-Correa, T.** (2013) "A Typology-Driven Damping Model (TD2M) to Enhance the Prediction of Tall Building Dynamic Properties Using Full-Scale Wind-Induced Response Data," *Proceedings of 12th Americas Conference on Wind Engineering*, Seattle, June 16-20.
8. LaBarge, J. and **Kijewski-Correa, T.** (2013) "Rapid Digitization of Structures for Automated Hurricane Risk Assessment within Cyber-Platforms," *Structures Congress*, Pittsburgh, PA, May 2-4.
9. Bentz, A. and **Kijewski-Correa, T.** (2013) "A Novel Approach to Predicting Damping: Insights from Structural System Typology," *Structures Congress*, Pittsburgh, PA, May 2-4.
10. **Kijewski-Correa, T.L.**, Taflanidis, A.A., Kennedy, A.B., Kareem, A. and J.J. Westerink (2012) "CYBER-EYE: Integrated Cyber-Infrastructure to Support Hurricane Risk-Assessment," *Advances in Hurricane Engineering Conference: Learning from Our Past*, Miami, FL, October 24-26. (presenter)
11. **Kijewski-Correa, T.** (2012), "On the Use of Wireless and Virtual Wireless Networks for Monitoring by End Users," *2012 Joint Conference of the Engineering Mechanics Institute and 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability (EMI/PMC 2012)*, Notre Dame, IN, June 17-20.
12. Bentz, A. and **Kijewski-Correa, T.** (2012) "A Predictive Model for Damping Based on Full-Scale Data and Structural System Characteristics," *2012 Joint Conference of the Engineering Mechanics Institute and 11th ASCE Joint Specialty Conference on Probabilistic Mechanics and Structural Reliability (EMI/PMC 2012)*, Notre Dame, IN, June 17-20.
13. **Kijewski-Correa, T.**, Taflanidis, A., Mix, D. and R. Kavanagh (2012) "The 2010 Haiti Earthquake: An Empowering Model for Residential Reconstruction," *2012 EERI Annual Meeting & National Earthquake Conference*, April 10-13, Memphis, TN (Poster).

14. **Kijewski-Correa, T.**, Kareem, A., Isyumov, N., Young, B. and W. Baker (2012) "Lessons Learned in a Decade of the Chicago Full-Scale Monitoring Program," *Proceedings of Structures Congress 2012*, March 29-31, Chicago.
15. Abdelrazaq, A., **Kijewski-Correa, T.**, Kareem, A. and R. Denoon, (2012) "An Integrated System for Web-Enabled Continuous Monitoring and Assessment of the World's Tallest Building," *Proceedings of Structures Congress 2012*, March 29-31, Chicago.
16. Kavanagh, R., Keller, B., Gilhooly, J., Mix, D., **Kijewski-Correa, T.**, and Taflanidis, A. (2012) "Achieving a Sustainable Framework for Affordable Housing in Haiti: A Community-Driven Solution," *Faces Behind the Figure: Visions of Prosperity, Progress & Human Potential, Fourth Annual Human Development Conference*, February 10-11, Notre Dame, IN .
17. Kwon, D.K., **Kijewski-Correa, T.**, Kareem, A. and Abdelrazaq, A. (2011) "Smartsync Framework in Structural Health Monitoring," *Proceedings of IABSE-IASS Symposium*, September 20-23, London, UK.
18. Kwon, D.K., **Kijewski-Correa, T.** and Kareem, A. (2011) "Event-Driven SmartSync System for Structural Health Monitoring of Tall Buildings," *Proceedings of 13th International Conference on Wind Engineering*, July 10-15, Amsterdam.
19. Bashor, R., Bobby, S., **Kijewski-Correa, T.** and Kareem, A. (2011) "Full-Scale Performance Evaluation of Tall Buildings Under Wind," *Proceedings of 13th International Conference on Wind Engineering*, July 10-15, Amsterdam.
20. **Kijewski-Correa, T.** (2011) "Open-Sourcing the Design of Civil Infrastructure: A Paradigm Shift," *Proceedings of Structures Congress*, April 14-16, Las Vegas, NV (presenter)
21. **Kijewski-Correa, T.**, Montestruque, L., Su, S., and Savona, G. (2010) "A Rapidly Re-Deployable Wireless Sensor Network for Structural Assessment by Non-Expert End Users: The CITI-SENSE Concept," *Proceedings of 5th World Conference on Structural Control and Monitoring*, July 12-14, Tokyo, Japan. (presenter)
22. Kwon, D.K., **Kijewski-Correa, T.**, and Kareem, A. (2010) "SmartSync: An Integrated Real-Time Monitoring and System Identification Platform for Tall Buildings," *Proceedings of 5th World Conference on Structural Control and Monitoring*, July 12-14, Tokyo, Japan. (presenter)
23. Bentz, A., Young, B., **Kijewski-Correa, T.** and Abdelrazaq, A. (2010) "Finite Element Modeling of Common Lateral Systems in Tall Buildings: Insights from Full-Scale Monitoring," *Proceedings of Structures Congress*, May 12-15, Orlando, FL.
24. Kwon, D., **Kijewski-Correa, T.** and Kareem, A. (2010) "SmartSync: An Integrated Real-Time Monitoring and SI System for Tall Buildings," *Proceedings of Structures Congress*, May 12-15, Orlando, FL.
25. Bentz, A. and **Kijewski-Correa, T.** (2009), "A Wavelet-Based Framework for System Identification of Tall Buildings Under Transient Wind Events," *Proceedings of 2009 Joint ASCE-ASME-SES Conference on Mechanics and Materials*, June 24-27, Blacksburg, VA.
26. **Kijewski-Correa, T.**, Henderson, A., Montestruque, L. and Rager, J. (2009), "Real-Time Sensor Fusion to Enhance Plume Detection in Urban Zones," *Proceedings of 11th Americas Conference On Wind Engineering*, June 22-26, San Juan, Puerto Rico (Presenter).

27. **Kijewski-Correa, T.** and Pirnia, D. (2009), "Pseudo-Full-Scale' Evaluation of Occupant Comfort in Tall Buildings," *Proceedings of 11th Americas Conference On Wind Engineering*, June 22-26, San Juan, Puerto Rico (Presenter).
28. Kareem, A., **Kijewski-Correa, T.**, Tamura, Y. and Madey, G. (2009), "Next Frontiers of Innovation, Discovery and Learning in Wind Engineering: A Cyberinfrastructure Perspective," *Cooperative Actions for Risk Reduction, Proceedings of 4th International Symposium on Wind Effects on Buildings and Urban Environment*, Tokyo, 4-6 March.
29. Su, S., **Kijewski-Correa, T.** and Pando Balandra, J. F., (2009), "Bivariate Regressive Adaptive INDEX for Structural Health Monitoring: Performance Assessment and Experimental Verification," *Proceedings of SPIE Smart Structures/NDE*, March 9-12, San Diego.
30. Bentz, A. and **Kijewski-Correa, T.** (2009) "Wind-Induced Vibrations of Tall Buildings: The Role of Full-Scale Observations in Better Quantifying Habitability," *IMAC XXVII: A Conference and Exposition on Structural Dynamics*, Rosen Shingle Creek Resort and Golf Club, Orlando, Florida, February 9-12.
31. **Kijewski-Correa, T.** (2009) "Reflections on an Interdisciplinary REU with Global Outreach: The ISTIM Experience," *National Science Foundation Engineering Education Awardees Conference*, Reston, VA, February 1-3. (Poster presentation)
32. **Kijewski-Correa, T.**, Talley, J., Bauer, P., Haenggi, Antsaklis, P., Lemmon, M., Laneman, N.L., Montestruque, L., , Fulton, J., Patnaik, G. (2008), "Real-Time Plume Detection in Urban Zones Using Networked Sensing Data," *Proceedings of Chem-Bio Defense Physical Science and Technology Conference*, New Orleans, LA, Nov. 17-21.
33. **Kijewski-Correa, T.**, Su, S. and Cycon, J. (2008) "System Identification in Wired, Wireless and Hybrid Architectures," *Proceedings of 5th International Engineering and Construction Conference (IECC'5)*, UC Irvine, August 27-29.
34. Meyers, K., Ohland, M., Silliman, S., McWilliams, L. and **Kijewski-Correa, T.** (2008), "Comparison of Two Peer Evaluation Instruments," *Proceedings of 2008 ASEE Conference*, AC 2008-674.
35. **Kijewski-Correa, T.**, Taciroglu, E. and Beck, J.L. (2008), "System Identification of Constructed Facilities: Challenges and Opportunities Across Hazards," *Proceedings of Structures Congress*, Vancouver, Canada, CD-ROM. (Presenter)
36. Oshnack, M. and **Kijewski-Correa, T.** (2007), "A Cross-Hazard Approach to Structural Design: Lessons From Reconnaissance and Prescriptive Codes," *Proceedings of Challenges and Opportunities for Sustainability*, ECI, November 7-9, Naples, FL (REU Student Poster).
37. **Kijewski-Correa, T.** and Cycon, J. (2007) "System Identification of Constructed Buildings: Current State-of-the-Art and Future Directions," *Proceedings of SHM-II 2007*, November, Vancouver, Canada. (Presenter)
38. Su, S. and **Kijewski-Correa, T.** (2007) "On the Use of a Bivariate Regressive Adaptive INDEX for Structural Health Monitoring," *Proceedings of SHM-II 2007*, November, Vancouver, Canada. (Presenter)
39. **Kijewski-Correa, T.** and Kareem, A. (2007), "Monitoring Serviceability Limit States in Civil Infrastructure: Lessons Learned from the Chicago Full-Scale Monitoring Experience," *Proceedings of 6th International Workshop on Structural Health Monitoring*, September 11-13, Stanford University.

40. **Kijewski-Correa, T., Pirnia, J.D., Bashor, R., Kareem, A., Kilpatrick, J., Young, B., Galsworthy, J., Isyumov, N., Morrish, D. and Baker, W.** (2007) "Full-Scale Performance Evaluation of Tall Buildings Under Winds," *Proceedings of 12th International Conference on Wind Engineering*, July 2-6, Cairns, Australia, vol. 1, pp. 351-358. (Presenter)
41. **Su, S. and Kijewski-Correa, T.** (2007) "Performance Verification of Bivariate Regressive Adaptive Index for Structural Health Monitoring," *Proceedings of SPIE Smart Structures and Materials & Nondestructive Evaluation and Health Monitoring*, March 18-22, San Diego, CA.
42. **Erwin, S., Kijewski-Correa, T. and Yoon, S.-Y.,** (2007) "Full-Scale Verification of Dynamic Properties from Short Duration Records," *Structures Congress 2007*, May 16-19, Long Beach, CA.
43. **Pirnia, J.D., Kijewski-Correa, T., Abdelrazaq, A., Chung, J., and Kareem, A.,** (2007) "Full-Scale Validation of Wind-Induced Response of Tall Buildings: Investigation of Amplitude-Dependent Dynamic Properties," *Structures Congress 2007*, May 16-19, Long Beach, CA.
44. **Toguchi, S., and Kijewski-Correa, T.,** (2006) "Improved Design of Residential Housing in Tsunami-Prone Regions: Quantification of Load Effects," *2006 Southern California Conference on Undergraduate Research (SCCUR)*, November 18, Occidental College, Los Angeles, CA.
45. **Kijewski-Correa, T., Su, S., Abittan, E., and Antsaklis, P.** (2006) "On the Use of Heterogeneous, Wireless Sensor Networks for Damage Assessment in Bridges Under Unknown Excitations," *Fourth World Conference on Structural Control and Monitoring (4WCSCM)*, July 11-13, San Diego, CA. (Presenter)
46. **Kijewski-Correa, T. and Kochly, M.** (2006) "Practical Considerations for Global Positioning Systems in Urban Zones," *Fourth World Conference on Structural Control and Monitoring (4WCSCM)*, July 11-13, San Diego, CA. (Presenter)
47. **Bashor, R.E., Kijewski-Correa, T.L., Kochly, M.C. and Kareem, A.** (2006) "Full-Scale Monitoring of Wind-Induced Response of Tall Buildings," *Fourth World Conference on Structural Control and Monitoring (4WCSCM)*, July 11-13, San Diego, CA.
48. **Kochly, M. and Kijewski-Correa, T.** (2006) "Experimental Verification of a GPS Network: Characterization and Removal of Multipath Effects," *Proceedings of SPIE International Symposia on Smart Structures & Materials/NDE*, February 26-March 2, San Diego.
49. **Kijewski-Correa, T., Haenggi, M. and Antsaklis, P.** (2005) "Multi-Scale Wireless Sensor Networks for Structural Health Monitoring," *Proceedings of SHM-II'05*, Nov. 16-18, Shenzhen, China.
50. **Kijewski-Correa, T., Young, B., Baker, W.F., Sinn, R., Abdelrazaq, A., Isyumov, N. and Kareem, A.** (2005) "Full-Scale Validation of Finite Element Models for Tall Buildings," *Proceedings of CTBUH 7th World Congress*, New York, Oct. 16-19.
51. **Abdelrazaq, A., Kijewski-Correa, T., Song, Y.-H., Case, P., Isyumov, N. and Kareem, A.** (2005) "Design and Full-Scale Monitoring of the Tallest Building in Korea: Tower Palace III," *Proceedings of 6th Asia-Pacific Conference on Wind Engineering*, Seoul, Korea, 12 - 14 September.
52. **Kwon, D.K., Kijewski-Correa, T. and Kareem, A.** (2005) "e-Analysis/Design of Tall Buildings Subjected to Wind Loads," *Proceedings of Americas Conference on Wind Engineering*, Louisiana State University, May 31-June 4.

53. Bashor, R., **Kijewski-Correa, T.** and Kareem, A. (2005) "On the Wind-Induced Response of Tall Buildings: The Effect of Uncertainties in Dynamic Properties and Human Comfort Thresholds," *Proceedings of Americas Conference on Wind Engineering*, Baton Rouge, LA, May 31-June 4.
54. Kijewski-Correa, T., Kilpatrick, J., Kwon, D.K., Bashor, R., Young, B.S., Abdelrazaq, A., Galsworthy, J., Morrish, D., Sinn, R.C., Baker, W.F., Isyumov, N. and Kareem, A. (2005) "Full-Scale Validation of the Wind-Induced Response of Tall Buildings: Updated Findings from the Chicago Monitoring Project," *Proceedings of Americas Conference On Wind Engineering*, Baton Rouge, LA, May 31-June 4.
55. Kochly, M. and **Kijewski-Correa, T.** (2005) "Monitoring Tall Buildings Under the Action of Wind: The Role of GPS in Urban Zones," *Proceedings of 4th European and African Conference on Wind Engineering*, Prague, July 11-15.
56. **Kijewski-Correa, T.**, Kilpatrick, J., Bashor, R., Kwon, D.K., Young, B., Sinn, R., Galsworthy, J., Morrish, D., Isyumov, N. and Kareem, A. (2005) "Full-Scale Validation of the Wind-Induced Response of Tall Buildings: Updated Findings from the Chicago Monitoring Project," *Proceedings of ASCE Structures Congress*, New York, April 20-24.
57. McNamara, R., Kareem, A. and **Kijewski-Correa, T.** (2005) "Redundancy and Robustness in the Design of Structural Systems for Tall Buildings: A Designers' Perspective," *Proceedings of ASCE Structures Congress*, New York, April 20-24.
58. Kochly, M., **Kijewski-Correa, T.** and Stowell, J. (2005) "GPS for Monitoring in Urban Zones: Calibration and Quantification of Multipath Effects," *SPIE Conference on Smart Structures and Materials/NDE for Health Monitoring and Diagnostics*, 6-10 March, San Diego.
59. **Kijewski-Correa, T.**, Kochly, M. and Stowell, J. (2004) "On the Emerging Role of GPS in Structural Health Monitoring," *Proceedings of CTBUH 2004*, Seoul, Korea, Oct 11-13. (Presenter)
60. **Kijewski-Correa, T.** and Kareem, A. (2004) "Time-Frequency Perspectives in the Analysis and Interpretation of Ground Motions and Structural Response," *Proceedings of 13th World Conference on Earthquake Engineering*, 1-6 August, Vancouver, BC, Canada.
61. **Kijewski-Correa, T.** and Kareem, A. (2004) "Time-Frequency Characterization of Nonlinear Dynamical Systems," *Proceedings of ASCE Conference on Probabilistic Mechanics and Structural Reliability*, Albuquerque, NM, July 26-28. (Presenter)
62. **Kijewski-Correa, T.** (2004) "GPS: A New Tool for Structural Health Monitoring," *Proceedings of Fourth International Workshop on Structural Control, International Association for Structural Control*, Columbia University, New York, 10-11 June, 2004. (Presenter)
63. **Kijewski-Correa, T.** and Kareem, A. (2004) "The Height of Precision: New Perspectives in Structural Monitoring," *Proceedings of Earth & Space: 9th Aerospace Division International Conference on Engineering, Construction and Operations Challenging Environments*, 7-10 March, Houston. (Presenter)
64. **Kijewski-Correa, T.** and Kareem, A. (2003) "The Chicago Monitoring Project: A Fusion of Information Technologies and Advanced Sensing in Civil Engineering," *Proceedings of First International Conference on Structural Health Monitoring and Intelligent Infrastructure*, 13-15 November, Tokyo.(Presenter)

65. **Kijewski, T.**, Kwon, D.K. and Kareem, A. (2003) "E-Technologies for Wind Effects on Structures," *Proceedings of 11th International Conference on Wind Engineering*, 2-5 June, Lubbock, TX. (Presenter)
66. Kilpatrick, J., **Kijewski, T.**, Williams, T., Kwon, D.K., Young, B., Abdelrazaq, A., Galsworthy, J., Morrish, D., Isyumov, N. and Kareem, A. (2003), "Full Scale Validation of the Predicted Response of Tall Buildings: Preliminary Results of the Chicago Monitoring Project," *Proceedings of 11th International Conference on Wind Engineering*, Lubbock, TX, 2-5 June. (Co-presenter)
67. **Kijewski, T.**, Brown, D., and Kareem, A. (2003), "Identification of Dynamic Properties of a Tall Building from Full-Scale Response Measurements," *Proceedings of 11th International Conference on Wind Engineering*, Lubbock, TX, 2-5 June. (Co-presenter)
68. **Kijewski, T.**, Kilpatrick, J., Williams, T., Kwon, D.K., Young, B., Abdelrazaq, A., Galsworthy, J., Morrish, D., Isyumov, N. and Kareem, A. (2003), "Full-Scale Validation of the Wind-Induced Response of Tall Buildings: Preliminary Results of the Chicago Monitoring Project," *Proceedings of 2003 Structures Congress*, ASCE, Seattle, 29 May - 1 June. (Presenter)
69. **Kijewski, T.** and Kareem, A. (2003), "GPS for Monitoring the Dynamic Response of Tall Buildings: Experimental Verification and Full-Scale Application," *Proceedings of 2003 Structures Congress*, ASCE, Seattle, 29 May - 1 June. (Presenter)
70. Kareem, A., **Kijewski, T.**, Chen, X. and Zhou, Y. (2002), "Dynamic Response of Long Period Structures: Computational Methods to Laboratory Experiments and Full-Scale Monitoring," *Proceedings of UJNR Workshop on Wind Engineering*, Seattle, October 2-5.
71. **Kijewski, T.** and Kareem, A. (2002), "Wavelet Transforms for System Identification and Associated Processing Concerns," *Proceedings of the 15th ASCE Engineering Mechanics Conference*, Columbia University, New York, June 2-5.
72. **Kijewski, T.** and Kareem, A. (2002), "GPS for Monitoring the Dynamic Response of Tall Buildings," *Proceedings of Structures Congress 2002*, ASCE, Denver, April 4-6. (Presenter)
73. McNamara, R., Kareem, A. and **Kijewski, T.** (2002), "Ask the Experts...Perception of Motion Criteria for Tall Buildings Subjected to Wind," *Proceedings of Structures Congress 2002*, ASCE, Denver, April 4-6.
(rapporteur, see www.nd.edu/~nathaz/perception/perception.html)
74. **Kijewski, T.** and Kareem, A. (2001), "Full-Scale Study of the Behavior of Tall Buildings Under Winds," *Proceedings of SPIE Symposium on NDE for Health Monitoring and Diagnostics*, Newport Beach, CA, March. (Presenter)
75. **Kijewski, T.** and Kareem, A. (2000), "Reliability of Random Decrement Technique for Estimates of Structural Damping," *Proceedings of ASCE Conference on Probabilistic Mechanics and Structural Reliability*, Notre Dame, IN, July 24-26. (Presenter)
76. Vandermeulen, R., **Kijewski, T.** and Kareem, A. (2000), "Bootstrap Method for Estimation of Spectral Bandwidth with Limited Observations," *Proceedings of ASCE Conference on Probabilistic Mechanics and Structural Reliability*, Notre Dame, IN, July 24-26. (Presenter)

77. Abdelrazaq, A., Baker, W., Isyumov, N., Kareem, A., **Kijewski, T.** and Sinn, R. (2000), "Study to Correlate Actual Expected Behavior of Tall Buildings Under Wind," *Proceedings of 2000 Structures Congress*, ASCE, Philadelphia, April.
78. **Kijewski, T.**, Kareem, A. and Tamura, Y. (1998), "Overview of Methods to Mitigate the Response of Wind-Sensitive Structures," *Proceedings of Structural Engineering World Congress*, CD-ROM, San Francisco, July. (Presenter)
79. Kareem, A. and **Kijewski, T.** (1997), "Wind Engineering Research and Development in the USA," *Proceedings of UJNR Workshop on Wind Engineering*.
80. Kareem, A., **Kijewski, T.** and Lu, P.C. (1997), "Investigation of Interference Effects for a Group of Finite Cylinders," *Proceedings of 8th US Conference on Wind Engineering*, CD-ROM, John Hopkins University, Baltimore, June. (Presenter)
81. **Kijewski, T.** and Kareem, A. (1997), "Dynamic Wind Effects Provisions in Codes and Standards and Wind Tunnel Data: A Comparative Study," *Proceedings of 8th US Conference Wind Engineering*, CD-ROM, John Hopkins University, Baltimore, June. (Presenter)

Other Publications

Technical Reports:

1. Erwin, S., **Kijewski-Correa, T.** and Yoon, S.W. (2006) *Analysis of Korean Reinforced Concrete Building Data*. DYNAMO Report 061130, Department of Civil Engineering and Geological Sciences, University of Notre Dame, Notre Dame, IN.
2. **Kijewski-Correa, T.**, Pirnia, D., Su, S., Kochly, M. and Descary, A. (2005) *Vibration Characteristics of the University of Notre Dame Science Learning Center Rooftop Observatory Area*. DYNAMO Report 050728, Department of Civil Engineering and Geological Sciences, University of Notre Dame, Notre Dame, IN.
3. **Kijewski, T.** and Kareem, A. (2000), "Estimation and Modeling of Damping and Engineering Auxiliary Damping Systems in Civil Engineering Structures: An Overview," NatHaz Modeling Laboratory Report to ASCE Committee on Wind Effects.

Keynotes and Invited Lectures, Panels and Workshops

1. Panelist, "Resiliency Monitoring", EMI 2013, Evanston, IL, August 7, 2013.
2. Keynote Speaker, "Virtual Communities," Sustainable Data Community Forum, Chicago, IL, July 19, 2013.
3. Invited Speaker, "Continuous Monitoring of Major Structures: Empowering End Users with Adaptive Platforms," Practical Health Monitoring for Transportation Structures, Transportation Research Board, 92nd Annual Meeting, Washington, DC, January 13, 2013.
4. Invited Seminar, "Is There Hope for the 1 in 7? A Story of Empowerment in Post-Quake Haiti," Rensselaer Polytechnic Institute, November 6, 2012.
5. Invited Seminar, "Learning from the Big Boys: What a Decade of Full-Scale Monitoring Has Taught Us About the Performance of Tall Buildings in Urban Zones," Rensselaer Polytechnic Institute, Nov. 7, 2012.
6. Keynote Speaker, "Empowering Sustainable Reconstruction of the Residential Sector Following the 2010 Haitian Earthquake," CONSTRUCT Conference, Phoenix, AZ, September 12, 2102.

7. Invited Panelist, "Human Perception of Motion in Wind-Excited Tall Buildings," Panel Discussion, Structures Congress 2012, Chicago, IL, March 30, 2012.
8. Invited Moderator, "Panel C – Sustainable Engineering and Environmental Practice," Fourth-Annual Human Development Conference, Notre Dame, IN, February 11, 2012.
9. Speaker, "An Empowerment Model for Sustainable Residential Reconstruction in Léogâne, Haiti, after the January 2010 Earthquake," Kellogg Institute for International Studies, University of Notre Dame, January 31, 2012.
10. Invited Speaker, "Development and Health in Haiti: How Foundations and Notre Dame's Haiti Program, Eck Institute, and College of Engineering are Fighting Disease and Building Infrastructure," University of Notre Dame Forum on Global Development, Washington DC, November 10, 2011.
11. Invited Speaker, Walter P. Moore Webinar Series, "Wind-Induced Response of Tall Buildings: Closing the Gap between Design Predictions and Full-Scale Behaviors," August 9, 2011.
12. Invited Speaker, Kellogg Institute for International Studies, "Engineering as a Force for Good in the World," June 15, 2011.
13. Invited Speaker, Chicago Committee on High Rise Buildings, 2011 Spring Seminar: "Wind Induced Building Movement," Chicago, Illinois, June 9, 2011
14. Invited Participant, NSF Workshop on a New Cross-Directorate Program on Disaster Resilience, Vulnerability, and Risk Reduction, Arlington, VA, June 1-2, 2011
15. Invited Participant, "A Multi-Hazard-Resilient Residential Housing Model for Haiti: Rebuilding Communities and Livelihoods through Sustainable Partitioning," *Sustainable Vision Kickoff Workshop*, National Collegiate Inventors and Innovators Alliance, Alexandria, VA, March 23, 2011
16. Keynote Speaker, "Doctors Aren't the Only Ones Saving Lives," Hypatia Day, Saint Mary's College, Notre Dame, IN, February 26, 2011
17. Invited Speaker, "Haiti Earthquake: Lessons Learned and Hope for the Future," Challenges and Innovations Seminar Series, Notre Dame, IN, September 2, 2010
18. Invited Participant and Working Group Secretary, "Leveraging Cyberinfrastructure to Achieve Hazard Resilient and Sustainable Communities: Lessons Learned in the Technology Adoption Life Cycle," US-Taiwan Workshop on the Advancement of Societal Responses to Mega-Disasters afflicting Mega-Cities, Taipei, May 6-7, 2010
19. Invited Participant, NEES Education, Outreach and Training Summer Workshop, Purdue University, June 18-29, 2010
20. Invited Participant, NSF Focus Group, Opening Science Gateways to Future Success, Chicago, IL, June 22-23, 2010
21. "Understanding Tall Buildings Under Wind: Full-Scale Dynamic Behaviors," NCSEA Webinar, May 21, 2009
22. "An Introduction to The Chicago Full-Scale Monitoring Program: ASCE's 2008 State-of-the-Art Award Winner," North Central Branch of the Indiana Section of the American Society of Engineers, Notre Dame, February 10, 2009.
23. "Performance Evaluation of Tall Buildings Under Winds: Insights from the Chicago Full-Scale Monitoring Program," NCSEA Winter Institute, Miami, January 24, 2008.
24. Building Effective Virtual Organizations, National Science Foundation Workshop, Washington, DC, January 14-16, 2007
25. "Performance Evaluation of Tall Buildings Under Winds," Structural Engineers Foundation, Structural Engineers Association of Illinois, Union League Club, Chicago, IL, November 7, 2006 (Co-Presenter: Ahsan Kareem).

26. "Impact of Disasters on Society," University Club, University of Notre Dame, October 10, 2006.
27. "An Overview of the Chicago Full-Scale Monitoring Program," Skidmore Owings & Merrill LLP, Chicago, October 20, 2004.
28. "Chicago Monitoring Project on Wind Effects," Illinois Institute of Technology, Department of Architecture, Chicago, May 1, 2004.
29. "Full-Scale Validation of the Wind-Induced Response of Tall Buildings: Updated Findings from the Chicago Monitoring Project," Chicago Committee on High Rise Buildings, Chicago, April 8, 2004.
30. "GPS: A New Tool for Structural Displacement Measurements," State of the Art Techniques for Monitoring and Protecting Historic Structures Symposium, Association for Preservation and Technology International, Columbia University, New York, March 27, 2004 (Co-Presenter: Ahsan Kareem).
31. "Time-Frequency Perspectives in Civil Engineering," Department of Structural Engineering, University of California San Diego, February 9, 2004.

Poster Sessions

Kijewski-Correa, T., Corke, T., Fernando, H. J., et al. (2010) "CYBER-EYE: A Cyber-Collaboratory for National Risk Modeling and Assessment to Mitigate the Impacts of Hurricanes in a Changing Climate," *Cyberinfrastructure Days*, Notre Dame, IN, April 29-30.

Taflanidis, A., Mix, D. and Kijewski-Correa, T. (2010) "Residential Housing in Leogane: Post-Quake Damage Assessment and Perspectives on Sustainable Rebuilding," *Haiti RAPID and Research Needs Workshop*, Arlington, VA, Sept. 30-Oct. 1.

Grants and Sponsored Programs

Funded:

1. "In-Situ Technology Incubators to Accelerate Sustainable Development Solutions: Can the Communities We Serve Become Their Own Engines of Innovation?" PI, \$20,000, Faculty Grant, Kellogg Institute for International Studies, Summer 2013.
2. "A Needs and Impact Assessment Tool for Footbridges in Rural Nicaragua: Field Development and Deployment in the Context of Student-Led Construction Efforts," Faculty Lead, \$5000, International Educational Opportunity Grant, Kellogg Institute for International Studies, Summer 2012.
3. "Empowering Haitian Recovery in the Urban Housing Sector: A Field Study on the Effectiveness of Technology Adoption Programming for Non-Expert Audiences," PI, \$6450, November 2011, Kellogg Institute for International Studies, University of Notre Dame, 3 months.
4. "A Multi-Hazard-Resilient Residential Housing Model for Haiti: Rebuilding Communities and Livelihoods through Sustainable Partitioning," PI, \$49,980, April 2011, NCIIA Sustainable Vision Grant, 24 months.
5. "CYBER-EYE: A Cyber-Collaboratory for National Risk Modeling and Assessment to Mitigate the Impacts of Hurricanes in a Changing Climate," PI: T. Kijewski-Correa, University of Notre Dame, Strategic Academic Planning Committee, University of Notre Dame, \$999,816 for 36 months

6. "CDI-Type II: Open Sourcing the Design of Civil Infrastructure (OSD-CI)," PI: T. Kijewski-Correa, September 2009, NSF CBET, \$1,450,000 for 48 months
7. "Building Movement Monitoring System," Co-PI: T. Kijewski-Correa, August 2009, Samsung Corporation, \$130,000 for 24 months
8. "Dynamic Properties of Apartment Building Based on Monitoring for the Justification of Structural Renovation," PI: T. Kijewski-Correa, Dankook University, Korea, January 2008, \$30,000 for 36 months
9. "Networked Sensing in Built and Natural Environments," Acting-PI, Congressional Directed Funding Initiative in collaboration with Crane Naval Surface Warfare Center, August 2007, \$2,200,537 for 12 months
10. "VORTEX-Winds: A Virtual Organization for Reducing the Toll of EXtreme Winds," Co-PI, NSF, CBET Division, October 2007, \$199,764 for 24 months
11. "Structural Health Assessment of Tower During Construction," Co-PI, Private Corporation, January 2007, \$199,172 for 24 months
12. "Networked Sensing in Built and Natural Environments," Co-PI, Congressional Directed Funding Initiative in collaboration with Crane Naval Surface Warfare Center, August 2006, \$1,751,000 for 12 months
13. "Performance Evaluation of Tall Buildings Under Winds: From Predictive Methods to Laboratory and Full-Scale Measurements," Co-PI, NSF, CMMI Division, September 2006, \$420,571 for 36 months
14. "REU Site: Interdisciplinary Studies in Tsunami Impacts & Mitigation," PI: T. Kijewski-Correa, NSF, EEC Division, June 2006, \$329,418 for 36 months
15. "Dynamic Properties of Building Based on Monitoring for Diagnosis: Notre Dame Collaborative Phase," PI: T. Kijewski-Correa, Dankook University, Korea, January 2006, \$20,000 for 24 months
16. "Restoration of Medium Scale Earthquake Simulator for Study of Structural and Soil Dynamics, Health Monitoring and Structural Control," PI: T. Kijewski-Correa, Equipment Restoration and Renewal Program, Graduate School, University of Notre Dame, January 2005, Amount: \$67,894 for 12 months

Master's Theses Directed

1. Michael Kochly (2006): *Validation of Global Positioning Systems for Monitoring Civil Infrastructure Systems: Performance Assessment and Removal of Multipath Effects*
2. Jennifer Cycon (2008): *Design and Validation of a Real-Time Structural Health Monitoring System Interfacing Through a Local Area Network*
3. J. David Pirnia (2009): *Full-Scale Dynamic Characteristics of Tall Buildings And Impacts on Occupant*
4. Stephen Erwin (2009): *Extraction of Full-Scale Dynamic Properties from Short Duration Records*
5. Jonathan Rager (2009): *Real-Time Detection of Plume Boundaries in a Chemical, Biological or Radiological Event*
6. John LaBarge (2012): *Rapid Infrastructure Digitization to Support High-Fidelity Hurricane Risk Assessment*
7. Dustin Mix (2013): *Empowerment Model for Post-Quake Reconstruction of Urban Housing in Haiti*
8. Sally Williams (TBD): *Modernizing the System Hierarchy for Tall Buildings via Multi-Objective Performance Metrics*

MSCE Committees: D. Brown (2003), T. Williams (2003), A. Vorwerk (2004), B. Morgen (2004), M. May (2006), E. Kerr (2006), K. Walsh (2009), A. Lamprou (2011), T. Wu (2012), M. Cowan (2013)

MSEE Committees: E. Abittan (2006)

Doctoral Dissertations Directed

1. Su Su (2012): *Decentralized Damage Detection in Civil Infrastructure Using Multi-Scale Wireless Sensor Networks*
2. Audrey Bentz (2012): *Predictive Models for Damping: Insights from Full-Scale Data and Structural System Characteristics*
3. Tara Weigand (TBD): *Data Mining Strategies to Support Long-Term Monitoring of Critical Infrastructure*
4. Andrew Bartolini (TBD): Project to Be Determined

PhD Committees: H. Jiang (CE 2009), L. Wang (CE 2007), L. Kerr (CE 2007), R. Bashor (CE 2011), Q. Shen (CE 2006), K. Butler (CE 2010), P. Mikrut (AME 2012), B. Smith (CE 2012), B. Sumanasena (EE 2011), T. Wu (CE TBD), Z. Zhai (CSE 2012), M. McCullough (CE TBD), G. Jia (CE TBD), K. Muller (CE TBD), Ravi Kiran Yellavajjala (CE TBD), Y. Guo (CE TBD), S. Bobby (CE TBD)

ESTEEM Theses Directed

Dustin Mix (2013): *Engineering2Empower: Building Homes, Building Businesses, Building Communities*

ESTEEM Committees: M. Zheng (2012)

Undergraduate Honors Theses

1. Jacqueline Gilhooly, "Engineering 2 Empower: An Empowerment Model to Address Permanent Residential Rebuilding in Urban Leogane, Haiti (2012)

Undergraduate Researchers Supervised

Director of Interdisciplinary Studies in Tsunami Impacts and Mitigation (ISTIM), REU Program, University of Notre Dame (2006-2008) [<http://istim.ce.nd.edu>]

Current Team:

- Structural System Typologies Hub: Carolyn Quigley
- Tall Building Monitoring Hub: Brad Geyer, Dylan Scarpato
- Natural Hazard Mitigation Hub: Omar Garcia, Erik Jensen, Kevin Stewart, Martin Le
- Citizen Engineering Hub: Nicholas Sikorski
- Engineering2Empower Hub: Kelsey Haddad, Quinn O'Heeney, Angelene Dascanio, Paul Giglioli, Meggan Muller, Brian Calcutt, Dan McGeever

Past E2E Teams:

- E2E Team (2010-2011): Ryan Kavanagh (REU), Ellen Quigley (REU), John LaBarge, Jacqueline Gilhooly (REU), Ben Keller, Alexander Wallach
- E2E Team (2011-2012): Ben Keller, Kelsey Haddad, Dan McGeever, Meggan Muller, Jacqueline Gilhooly, Anna Wanzek, Ryan Kavanagh
- E2E Team (2012-2013):

Past Students:

1. Kevin Bott, University of Notre Dame, *Full-Scale Data Analysis for Chicago Full-Scale Monitoring Project*, 2004-2005.
2. Joseph Pomerence, University of Notre Dame, *Full-Scale Data Analysis for Boston Hancock*, 2004-2005.
3. Kevin Haas, University of Notre Dame, *Next Generation GPS for Monitoring Civil Structures in Urban Zones*, 2005.
4. Andrew Descary, California Polytechnic State University, *Next Generation GPS for Monitoring Civil Structures in Urban Zones*, 2005.
5. Jim Hagemann, University of Notre Dame, *Full-Scale Data Analysis for Boston Hancock*, 2005-2006.
6. Peter Sweeney, University of Notre Dame, *Full-Scale Data Analysis for Chicago Full-Scale Monitoring Project*, 2005.
7. Bria Whitmire, University of Texas, San Antonio, *Improved Residential Construction in a Tsunami Zone: Quantification of Design Capacity*, ISTIM Program, Summer 2006.
8. Stacey Toguchi, Loyola Marymount University, *Improved Design of Residential Housing in Tsunami-Prone Regions: Quantification of Load Effects*, ISTIM Program, Summer 2006.
9. Manuel Nuno, University of Notre Dame, *Effect of Baseline Positioning on GPS Displacements*, 2006-2008.
10. Anna Lacey, University of Notre Dame, *Documentation and Databasing of Tsunami Damage and Reconnaissance Studies in Thailand*, 2006-2007.
11. Mary Beth Oshnack, University of Pittsburgh, *A Multi-Hazard Approach to Structural Design: Lessons from Reconnaissance and Prescriptive Codes*, Summer 2007.
12. Ellen Heintzman, University of Notre Dame, *Full-Scale Evaluation of a Tall Building in Korea*, Spring 2008.
13. Elaine Huffman, Virginia Tech University, *Performance of Schools and Other Essential Facilities in Natural Disasters*, Summer 2008.
14. Juan Pando Balandra, University of Notre Dame, *Experimental Validation of Bivariate Regressive Adaptive Index for Damage Detection*, Summer 2008.
15. Bethany Noble, University of Notre Dame, *Use of Cyberinfrastructure to Aid in the Mitigation of Natural Disasters*, 2008-2010.
16. Avery Ambrose, University of Notre Dame, *Finite Element Modeling of Central Plaza in Hong Kong*, Spring 2009.
17. Michael Wodarczyk, University of Notre Dame, *Finite Element Modeling of Boston Hancock Tower*, Spring 2009.
18. Antonio Ayala, University of Notre Dame, *Anomaly Detection and Correction in Full-Scale GPS Data*, 2009-2010.
19. Jonathan Barry, University of Notre Dame, *Fatigue Detection in Flexible Masts Under Wind*, Spring 2010.

20. Peter J. Koppel, University of Notre Dame, *Finite Element Modeling of Bank of China*, Spring 2010.
21. Enrique Descamps, University of Notre Dame, *Modeling of Soil-Structure Interaction in Tall Buildings*, Spring 2010.
22. Benjamin Mall (REU), University of Notre Dame, *Open-Sourcing the Design of Civil Infrastructure*, Spring 2011.
23. Sally Williams, University of Notre Dame, *Mitigation of Multipath Effects in Tall Buildings*, 2011-2012

Post-Docs and Visiting Researchers Supervised

1. Nelson Duran, University of Notre Dame (2003-2005)
2. Dr. Sung Won Yoon, Seoul National University of Technology (2006-2007)

Teaching Accomplishments

Courses Taught/Developed

- EG 10111: Introduction to Engineering Systems I – Module 1: The Tower Builder
- CE 40240/60240: Structural Systems
- CE CE 40280: Structural Steel Design
- CE 70250: Experimental Structural Dynamics
- CE 45600: Civil Engineering Service Projects (ND SEED/Bridges to Prosperity Initiative)
- CE 331: Probabilistic and Statistical Methods in Engineering

STUDENT EVALUATIONS (CIF SYSTEM)

Course	Term	Enrollment	Composite	Overall Effectiveness
			Max 5	Max 5
CE 40240/60240: Str. Systems	F 2013	20		
CE 45600: ND SEED	F 2013	7		
CE 70250: Exp. Str. Dynamics	S 2013	5	4.1	4.3
CE 45600: ND SEED	S 2013	7	4.8	4.8
CE 40240/60240: Str. Systems	F 2012	46	4.2	4.3
CE 45600: ND SEED	F 2012	7	4.6	4.6
CE 45600: ND SEED	S 2012	6	4.4	4.8
CE 45600/35600/25600: ND SEED	F 2011	7	4.7	4.8
CE 40280: Structural Steel Design	S 2011	39	4.4	4.5
CE 45600/35600/25600: ND SEED	S 2011	7	4.3	4.4
CE 45600/35600/25600: ND SEED	F 2010	7	4.4	4.2
CE 40240/60240: Str. Systems	F 2010	26	4.5	4.8
CE 40280: Structural Steel Design	S 2010	23	4.5	4.9
CE 70250: Exp. Str. Dynamics	S 2010	4	4.7	5.0
CE 45600/35600/25600: ND SEED	S 2010	7	4.4	4.3
CE 40280: Structural Steel Design	S 2009	31	4.7	4.9
EG 10111: Intro to Eng Systems	F 2008	387	3.74	3.9
CE 40240/60240: Str. Systems	F 2008	17	4.3	4.3

STUDENT EVALUATIONS (TCE SYSTEM)

Course	Term	Q17
		<i>Max 4</i>
CE 70250: Exp. Str. Dynamics	S 2008	3.6
CE 40280: Structural Steel Design	F 2007	3.6
EG 10111: Intro to Eng Systems	F 2007	3.2
CE 40280: Structural Steel Design	S 2007	3.6
CE 40240/60240: Str. Systems	F 2006	3.7
EG 10111: Intro to Eng Systems	F 2006	3.4
CE 70250: Exp. Str. Dynamics	S 2006	3.8
CE 40280: Structural Steel Design	F 2005	3.3
CE 40240/60240: Str. Systems	S 2005	3.9
CE 40280: Structural Steel Design	F 2004	3.2
CE 70250: Exp. Str. Dynamics	S 2004	3.6
CE 331: Prob/Stat Methods in Engineering	F 2003	3.8

Service

Outreach Service Programs:

- Expanding Your Horizons Program, Breakout Session Leader (2002), Presenter (2003-2004, 2010), Steering Committee (2004-2010), Presenter Coordinator (2008-2010)
- Notre Dame Introduction to Engineering Program, Presenter (2005, 2008)
- Upward Bound, Presenter (2004)
- Instructor, Ameritech Pre-college Minority Engineering Program (2000-2004)
- Lab Organizer, Ms. Wizard Day (2000-2003)
- Co-Organizer, Quakes and Shakes Outreach Program (2001-2002)

University Service:

- Member, Review Committee, Dean, School of Architecture (2013)
- Kellogg Institute Faculty Committee (2012-present)
- Kellogg Institute Grants Committee (2011-2012)
- Notre Dame Forum Committee (2011-2012)
- Faculty Board on Athletics (2009-2012)
- Institute for Global Development Committee (2010-2011)
- Strategic Planning for Latin America and the Caribbean Committee (2010-present)
- Ad-Hoc Committee on Statistics (2006-2008)
- Ad-Hoc Committee on Haiti (2010)
- Graduate Fellowship Proposal Reviewer, Center for Applied Mathematics (2005)
- Valedictorian Selection Committee (2005-2008)
- Graduate Fellowship Reviewer, Graduate School (2010)
- Claire Boothe Luce Fellowship Reviewer, Center for Undergraduate Scholarly Engagement (2010)
- External Review Panelist: School of Architecture (2011), Center for Social Concerns (2010)

College Service:

- Engineering Honors Program, Committee (2007-2008)
- College Council, College of Engineering (2006-2009)
- Mentor, Building Bridges Program (2012-present)
- Engineering Honors Program, Mentor (2005-present)

Department Service:

- ABET Committee on Structural Engineering Curriculum: member (2003-present), Chair (2008-2010)
- Structures Search Committee (2006-present), Chair (2008-2010)
- Chi Epsilon Honor Society, Faculty Advisor (2007-present)
- Department Committee on Appointments and Promotions (2009-present)
- Ad Hoc Committee on Sophomore Course Sequence (2008-2009)
- Graduate Studies Committee (2004-2005, 2005-2006)
- Undergraduate Academic Advisor (Approx. 10 students annually)
- Advisor to Kiewit Construction Expedition to Tacoma Narrows and Bay Bridges (Fall 2003)
- Hydraulics/Water Resources Search Committee (2008-2009)
- Linbeck Chair Search Committee (2003-2009)