

CURRICULUM VITAE

CV SECTION 1: Employment History/Awards

NAME

Rodolfo Valdes-Vasquez, Ph.D., PE*, A.M. ASCE, ENV SP

ADDRESS

Department of Construction Management
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PHONE

(970) 491-0278

EDUCATION

2011 Ph.D., Civil Engineering, Clemson University
2006 M.S., Construction Science and Management, Clemson University
2000 B.S., Civil Engineering, Technological University of Panama

Certifications:

2017 Envision Sustainability Professional, Institute for Sustainable Infrastructure (recertified 2024)
2010 Teaching Certificate in Engineering and Science Education, Clemson University
2010 Concept Systems Facilitator, Concept Systems Incorporated
2009 Human Subject Research Certificate, Clemson University (recertified at CSU in 2022)
2007 Project Leader Training, University of Texas at Dallas and Panama Canal Authority
2000 *Panamanian Professional Engineer License

ACADEMIC POSITIONS

(2021-present) Special Appointment with the CSU Systems Engineering Department
(2019-2024) Graduate Program Coordinator, CSU Department of Construction Management
(2019-present) Special Appointment with the CSU Civil and Environmental Engineering Department
(2018-present) Associate Professor, Department of Construction Management, Colorado State University
(2015-present) Faculty Scholar, CSU School of Global Environmental Sustainability (SoGES)
(2012-2018) Assistant Professor, Department of Construction Management, Colorado State University
(2011-2012) Post-Doctoral Research Associate, Civil Engineering Department, Clemson University
(2009-2011) Graduate Research Assistant, Civil Engineering Department, Clemson University
(2008) Graduate Research Assistant, Const. Science and Mgmt. Department, Clemson University
(2007-2008) Lecturer, Civil Engineering Department, Technological University of Panama (TUP)
(2000-2003) Lecturer, Civil Engineering Department, Technological University of Panama (TUP)

SABBATICALS

2020 University of Puerto Rico-Mayaguez and Polytechnic University of Valencia, Spain.

Note: The sabbatical was only planned for the spring semester, and was cancelled due to the 2019-2020 earthquakes in Puerto Rico and the COVID-19 pandemic.

OTHER POSITIONS

(2006-2007) Safety Inspector and Project Engineer, TUP's Experimental Engineering Center, Panama
(1999-2000) Project Engineer, A. Harris Engineers Consultant, Panama

CURRENT JOB DESCRIPTION

55% Teaching, **35%** Research/Creative Activity, **10%** Service/Outreach, **0%** Administration

Note: From spring 2019 to summer 2024, my teaching effort was **45%** and service/outreach **20%**.

HONORS AND AWARDS

2024 Region 6 **Outstanding Educator Award**, Associated Schools of Construction (ASC), Auburn, AL
2024 **Faculty Service Award**, CSU Department of Construction Management, Fort Collins, CO
2019 [Excellence in Education Abroad Curriculum Design](#), the Forum on Education Abroad, Kansas City, MO
2019 Education Abroad Advisory Committee (EAAC) **Partner of the Year**, CSU Office of International Programs, Fort Collins, CO
2018 **Best Poster Award**, American Society for Engineering Education (ASEE) International Division, Salt Lake City, UT

- 2016 Region 6 - **Teaching Award**, Associated Schools of Construction (ASC), Provo, UT
- 2014 Excellence in Civil Engineering Education (ExCEED) **Fellow**, American Society of Civil Engineers (ASCE), United States Military Academy, NY
- 2013-2014 GE Johnson **Faculty Scholar**, CSU Department of Construction Management, Fort Collins, CO
- 2013 National **Memorial Scholarship**, Home Performance Coalition (HPC), Denver, CO
- 2012 **Outstanding Reviewer**, ASCE's J. of Professional Issues in Eng. Educ. and Practice, Reston, VA.
- 2012 Leadership Institute **Fellowship-Emerging Leader**, Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), Washington, DC
- 2011 Distinguished **Graduate Student Fellowship**, Clemson University's Graduate School, Clemson, SC
- 2010 **Doctoral Student Research Poster Award**, Construction Research Congress (CRC), Banff, Canada.
- 2004 Dagny Midelfort Book Award - **Outstanding ESL Student Award**, Department of Languages, UW- Eau Claire, Eau Claire, WI
- 2004-2006 Fulbright-LASPAU **Scholar**, U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA), Univ. of Wisconsin-Eau Claire, WI and Clemson University, SC

Note: In addition to the above awards and honors, I have received numerous travel awards (~\$20,000) throughout my academic career, including multiple NSF-funded Travel Grants for presenting research at the Engineering Sustainability Conferences (2009-2017) and other specialized workshops, such as the 2022 Next Generation Learning-Centered Environment for Architecture, Engineering, and Construction (AEC), the 2022 Catalyzing Collaborations: Networking to build teams for NSF RIEF grant, the Sustainability Engineering Education Workshop at Syracuse University (2012) and the S2QBIDEC panel in Fort Worth, Texas (2012). Additionally, I have been honored with the ASEE Civil Engineering Division Scholarship to be part of the ASEE conference, as well as, multiple SACNAS Travel Scholarship Awards recognizing my mentorship and participation at the SACNAS National Conferences (2009, 2012, 2016, and 2017). I have also received support from the CSU Office of International Programs for presenting at conferences like the AASHE Conference and supporting professional networking. These awards highlight my commitment to advancing research, sustainability, and education within the construction and engineering community.

CV SECTION 2: Publications/Scholarly Record

My scholarship focuses on **integrating theory and practice related to sustainable buildings and infrastructure** to advance construction knowledge. Working within the Department of Construction Management, I have research in progress and have co-authored journal articles and conference proceedings with several research faculty members at CSU, from institutions across the U.S. and abroad, exemplifying collaborative efforts.

Through empirical studies, case studies, systematic reviews, and innovative learning approaches, I address systemic inequities and promote inclusive decision-making processes in construction and sustainability practices. My research integrates **diverse perspectives and comprehensive methodologies** to assess and enhance social sustainability outcomes. By advocating for the adoption of social sustainability indicators, incorporating community feedback, and promoting equitable policies, my work significantly contributes to more inclusive and socially just construction practices. These efforts advance the field by offering actionable frameworks and insights for practitioners and educators to foster equitable outcomes and improve societal well-being.

My research is **interdisciplinary**, particularly in Social Sustainability and Construction/Engineering Education, addressing topics ranging from developing collaboration skills to understanding decision-making process. The implementation of Building Information Modeling for energy simulation is also a key aspect of my research. Beyond publishing papers and securing funding, I believe in adding value by *mentoring future scholars, networking at professional conferences, and serving as an academic leader*. For instance, my social sustainability framework has garnered significant citations and supported my receipt of externally funded travel grants, enabling me to present my research and mentor others both domestically and internationally.

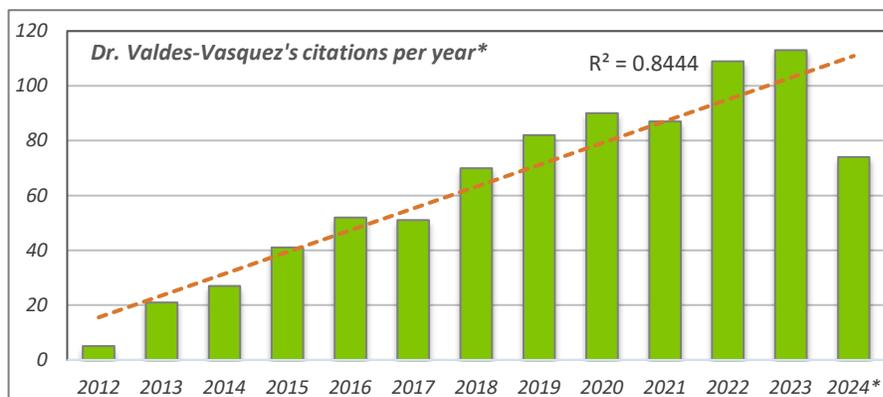
PUBLISHED WORKS

I aim to publish my work in journals that support dissemination to communities with shared research interests and allow for critical review, ultimately improving my scholarship. I target *ASCE journals* for their large readership in my discipline and focus on **construction research education, sustainability** and **green building journals** with broad international readership. For specialized topics, I publish in relevant, well-regarded journals. This publication approach enhances the visibility and impact of my research while aligning with my commitment to advancing

knowledge in sustainability, social equity, construction management, and construction/engineering education. Below is the progression of my citations since I join Colorado State University in 2012.

Dr. Valdes-Vasquez's h-index
 (*Source: Google Scholar as early August 2024*)

	All	Since 2019
Citations	834	558
h-index	11	11
i10-index	14	12



Refereed Journal Articles (* indicates graduate student).

Note: Author contributions to the work are indicated with an “X” after the reference.

1. Nguyen, F. B. T.*, Grigg, N., & **Valdes-Vasquez, R.** (2024). “A Proposed Quality Control Process for Front-End Planning to Minimize Risk of Field Change Orders in Underground Electrical Construction.” *The Electricity Journal*. ELSEVEIR. (Accepted July 16, 2024). DOI: <https://doi.org/10.1016/j.tej.2024.107424>
 [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
2. Passos Neto, GdM*, Alencar, LH, & **Valdes-Vasquez, R.** (2023). “Multiple-Criteria Methods for Assessing Social Sustainability in the Built Environment: A Systematic Review.” *Sustainability*, 15 (23):16231. MDPI. DOI: <https://doi.org/10.3390/su152316231>
 [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
3. Nguyen, F. B. T.*, Grigg, N., & **Valdes-Vasquez, R.** (2023). “Electric Utility Construction: Causes and Types of Field Change Orders.” *The Electricity Journal*, 36(8), 107332. ELSEVIER. DOI: <https://doi.org/10.1016/j.tej.2023.107332>
 [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
4. Pradhan, S.*, Arneson, E, **Valdes-Vasquez, R.** & Mahmoud H. (2023). “How Construction and Socioeconomic Resource Availability Affected Housing Recovery after Hurricane Sandy.” *Natural Hazards Review*, 24 (3). ASCE. DOI: <https://doi.org/10.1061/NHREFO.NHENG-1703>
 [] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
5. Davis, B. *, **Valdes-Vasquez, R.**, & Dunbar, B. (2023). “Assessing the Application of LEED Requirements of a High Volume Project Owner in the United States.” *Journal of Green Building*, 18 (2), 43-64. College Publishing DOI: <https://doi.org/10.3992/jgb.18.2.43>
 [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
6. Luxton, I. *, **Valdes-Vasquez, R.**, Ozbek, M. E., & Thornes, L. (2022). “High Impact Learning in a Short-Term Study Abroad Program.” *Frontiers: The Interdisciplinary Journal of Study Abroad*, 34(1), 97-130. OJS/ PKP. DOI: <https://doi.org/10.36366/frontiers.v34i1.541>
 [X] Research Design, [] Data Collection, [] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
7. Besiktepe*, D., **Valdes-Vasquez, R.**, Strong, K. & Shuler, S. (2022). “Improving Performance of Emergency Escape Ramps (EERs),” *Journal of Transportation Safety and Security*, 14:4, 541-561. Taylor & Francis. DOI: [10.1080/19439962.2020.1796864](https://doi.org/10.1080/19439962.2020.1796864)
 [X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
8. Love, H. B., **Valdes-Vasquez, R.**, Olbina, S., Cross, J. E., & Ozbek, M. E. (2022). “Is cultivating reciprocal learning the gold standard for high impact pedagogies?” *Higher Education Research & Development*, 41:4, 1136-1151. Taylor & Francis. DOI: [10.1080/07294360.2021.1896483](https://doi.org/10.1080/07294360.2021.1896483)
 [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
9. Silva, M.C.d.C.*, Silva, A.D.O.*, Kohlman Rabbani, E.R.; Alencar, L.H.; Passos Neto, G.d.M.*, Couto, J.P.; **Valdes-Vasquez, R.** (2022). “Guidelines for the Implementation of BIM for Post-Occupancy Management of Social Housing in Brazil.” *Energies*, 15, 6802. MDPI. DOI: <https://doi.org/10.3390/en15186802>
 [X] Research Design, [] Data Collection, [] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript

10. Passos Neto, G.d.M.* , Kohlman Rabbani, E. R., **Valdes-Vasquez, R.**, & Alencar, L. H. (2022). “Implementation of the Global Reporting Initiative Social Sustainability Indicators: A Multi-Case Study Approach using Brazilian Construction Companies.” *Sustainability*, 14(14), 8531. MDPI. DOI: <https://doi.org/10.3390/su14148531>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
11. Burgoon, J., Arneson, E., Elliott, J. W., & **Valdes-Vasquez, R.** (2021). “Visual Ethnographic Evaluation of Construction Programs at Public Universities: Who is Valued in Construction Education?” *Journal of Management in Engineering*, 37(4), 04021025. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000899](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000899)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
12. Rokde, P.* , **Valdes-Vasquez, R.**, & Mosier, R. (2019). “The Green Status of Fire Stations in the US: An Analysis of LEED-NC v3.” *Journal of Green Building*, 14 (2), 137-153. College Publishing. DOI: <https://doi.org/10.3992/1943-4618.14.2.137>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
13. Lewis, A.M.* , **Valdes-Vasquez, R.**, & Clevenger, C. (2019). “Understanding the Perceived Value of Using BIM for Energy Simulation.” *Journal of Green Building*, 14 (1), 79-92. College Publishing. DOI: <https://doi.org/10.3992/1943-4618.14.1.79>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
14. Elliott, J.W., Glick, S., and **Valdes-Vasquez, R.** (2018). “Student Perceptions of Model-Based Estimating.” *Int. J. of Construction Education and Research*, 15(2), 118–135. Taylor & Francis. DOI: <https://doi.org/10.1080/15578771.2018.1460642>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
15. Huges, E.* , **Valdes-Vasquez, R.**, and Elliott, J. (2017). “Perceptions of Compressed Earth Block among Residential Contractors in North Carolina: An Exploratory Evaluation.” *Journal of Green Building*, 12(4), 89-107. College Publishing. DOI: <https://doi.org/10.3992/1943-4618.12.4.89>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
16. Shealy, T., **Valdes-Vasquez, R.**, Klotz, L., Potvin, G., Godwin, A., Cribbs, J., and Hazari, Z. (2016). “Half of Students Interested in Civil Engineering Do Not Believe in Anthropogenic Climate Change.” *J. of Professional Issues in Engineering Education and Practice*, 143(3), D4016003. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000323](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000323)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
17. **Valdes-Vasquez, R.** and Clevenger, C. (2015). “Piloting Collaborative Learning Activities in a Sustainable Construction Class.” *Int. J. of Const. Education and Research*, 11(2), 1-18. Taylor & Francis. DOI: <https://doi.org/10.1080/15578771.2014.990122>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
18. Shealy, T., **Valdes-Vasquez, R.**, Klotz, L., Potvin, G., Godwin, A., Cribbs, J., & Hazari, Z. (2015). “Career Outcome Expectations Related to Sustainability among Students Intending to Major in Civil Engineering.” *J. of Professional Issues in Engineering Education and Practice*, 142(1), 04015008. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000253](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000253)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
19. **Valdes-Vasquez, R.**, Lewis, A. M.* , & Strong, K. C. (2014). “Assessment of a System for Debris Removal at High Speeds.” *Transportation Research Record: J. of the Transportation Research Board*, 2440 (1), 9-15. TRB of the National Academies. DOI: <https://doi.org/10.3141/2440-02>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
20. **Valdes-Vasquez, R.**, Klotz, L., Shealy, T.* , Lock, R., Godwin, A.* , Hazari, Z., and Potvin, G. (2014). “Just like all the rest? College Students who Exhibit Pro-sustainability Attitudes and Behaviors.” *J. of College Admissions*, 225 (4), 16-26. National Association for College Admission Counseling (NACAC).
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
21. Lewis, A.M.* , **Valdes-Vasquez, R.**, Clevenger, C., and Shealy, T.* (2014). “BIM Energy Modeling: Case Study of a Teaching Module for Sustainable Design and Construction Courses.” *J. of Prof. Issues in Eng. Education and Practice*, 141(2), C5014005. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000230](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000230)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript

22. **Valdes-Vasquez, R.** and Klotz, L. (2013). “Social Sustainability Considerations during Planning and Design: A Framework of Processes for Construction Projects.” *J. of Construction Engineering and Management*, 139(1), 80-89. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000566](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000566)
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
23. **Valdes-Vasquez, R.** and Klotz, L. (2013). “Using the Concept Mapping Method for Empirical Studies in Construction Research.” *J. of Construction Engineering and Management*, 139(10), 04013002. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0000720](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000720)
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
24. Cattano, C.*, **Valdes-Vasquez, R.**, Plumblee, J.*, II, and Klotz, L. (2013). “Potential Solutions to Common Barriers Experienced during the Delivery of Building Renovations for Improved Energy Performance: Literature Review and Case Study.” *J. of Architectural Engineering*, 19 (3), 164–167. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)AE.1943-5568.0000126](https://doi.org/10.1061/(ASCE)AE.1943-5568.0000126)
[] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
25. **Valdes-Vasquez, R.** and Klotz, L. (2011). “Incorporating the Social Dimension of Sustainability into Civil Engineering Education.” *J. of Professional Issues in Engineering Education and Practice*, 137(4), 189-197. ASCE. DOI: [https://doi.org/10.1061/\(ASCE\)EI.1943-5541.0000066](https://doi.org/10.1061/(ASCE)EI.1943-5541.0000066)
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
26. **Valdes-Vasquez, R.** and Klotz, L. (2010). “Considering Social Dimensions of Sustainability during Construction Project Planning and Design.” *The Int. J. of Environmental, Cultural, Economic and Social Sustainability*, 6(6), 167-180. Common Ground. DOI: <https://doi.org/10.18848/1832-2077/CGP/v06i06/54842>
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript

Refereed Proceedings/Transactions (* indicates graduate student, ** indicates undergraduate student).

1. Cape, C.**, **Valdes-Vasquez, R.** & Dunbar, B. “Comparing the eCO₂ Emissions Effects of Two Slab-on-Grade Screeding Methods.” Proceedings of 2024 ASC International Conference, April 2-5, Auburn, AL. <https://doi.org/10.29007/xqds>
[X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
2. Wahl, T.**, **Valdes-Vasquez, R.** & Olbina, S. “Opportunities for Improving Water Certification on LBC Projects in Semi-Arid Climates: Colorado Case.” Proceedings of 2024 ASC International Conference, April 2-5, Auburn, AL. <https://doi.org/10.29007/bjxv>
[X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
3. Pilgrim, B. & **Valdes-Vasquez, R.** “A Framework for Model-Based Estimating in Preconstruction: A Scalable Approach.” Proceedings of 2024 ASC International Conference, April 2-5, Auburn, AL. <https://doi.org/10.29007/t61f>
[X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
4. Vaidyanath, M.*, **Valdes-Vasquez, R.** and Arneson, E. (2024). “Redlining’s Impact: An Exploratory Study on the Long-Term Effects of Historical Housing Policies on Marginalized Communities in Denver and Key Successes of Remediation Policies Implemented.” Proceedings of 7th Residential Building Design & Construction Conference (RBDCC), March 27-28, University Park, PA. <https://www.phrc.psu.edu/assets/docs/Publications/2024RBDCCPapers/2024-RBDCC-Proceedings.pdf>
[X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
5. Besiktepe, D., Bayhan, H.* & **Valdes-Vasquez, R.** (2024). “Challenges in Supplier Diversity and Inclusions Programs in the U.S. Construction Industry.” Proceedings of the Construction Research Congress 2024, March 20-23, Des Moines, IA. <https://doi.org/10.1061/9780784485293.034>
[X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
6. **Valdes-Vasquez, R.** & Ozbek, M. E. (2024). “The First Four Weeks Initiative: Preparing Students For Success In An Introductory Construction Management Course.” Proceedings of the Latin American Structural Engineering and Construction Conference, LATAM SEC, March 4-7, Quito, Ecuador. [doi: 10.14455/ISEC.2024.11\(1\).EPE-01](https://doi.org/10.14455/ISEC.2024.11(1).EPE-01)
[X] Research Design, [] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
7. **Valdes-Vasquez, R.**, Olbina, S., Clevenger, C., & Ozbek, M. E. (2024). “Video Tours of Sustainable Building Projects on Campus: A Practical Approach to Teaching Sustainability.” Proceedings of the Latin American Structural Engineering and Construction Conference, LATAM SEC, March 4-7, Quito, Ecuador. [doi: 10.14455/ISEC.2024.11\(1\).SUS-05](https://doi.org/10.14455/ISEC.2024.11(1).SUS-05)
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript

8. Puletapuai, C.*, Birmingham, D., & **Valdes-Vasquez, R.** (2023). “Where are the women of Color professors?: Multicultural career sustainability utilizing participatory action research.” In *2023 ASEE Annual Conference & Exposition*, June 25-28, Baltimore, MD. <https://peer.asee.org/44024>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
9. Passos, G.*, **Valdes-Vasquez, R.**, Alencar, L. and Ozbek, M. (2023). “A Review of Social Sustainability Studies Involving Multiple Criteria within the Construction Industry.” *Proceedings of 2023 ASC International Conference*, April 3-5, Liverpool, England. <https://doi.org/10.29007/cb71>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
10. Ellis, S.*, **Valdes-Vasquez, R.** and Arneson, E. (2023). “How the COVID-19 Pandemic Affected the U.S. Residential Construction Industry’s Labor Workforce: An Analysis of Interior vs. Exterior Trades in three Metropolitan Areas.” *Proceedings of 2023 ASC International Conference*, April 3-5, Liverpool, England. <https://doi.org/10.29007/ck2q>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
11. Sanford, K. L., & Paige, F., & Parker, P. J., & **Valdes-Vasquez, R.** (2023, June). “WIP – Community of Practice as a Theory of Change for Infrastructure Education.” Paper presented at *2023 ASEE Annual Conference & Exposition*, June 25-28, Baltimore, MD. <https://peer.asee.org/42720>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
12. **Valdes-Vasquez, R.**, & Sanford, K. L., & Paige, F., & Parker, P. J. (2023, June). ”Work in Progress: Assessing a Faculty Community of Practice and Identifying Its Opportunities to Enhance Equitable Infrastructure Education.” Paper presented at *2023 ASEE Annual Conference & Exposition*, June 25-28, Baltimore, MD. <https://peer.asee.org/42792>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
13. Altmann, R.*, Senior, B., **Valdes-Vasquez, R.** & Atadero, R., (2022). “CO₂eq Comparison Between a Light Gauge Steel Framing Structure and a CMU Structure for Single Family Residential Projects in Costa Rica.” *EPiC Series in Built Environment*, 3, 740-748. <https://doi.org/10.29007/qsqs>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
14. **Valdes-Vasquez, R.**, & Besiktepe, D. (2022). “Understanding How Green Contractors Displayed Social Sustainability Actions due to the BLM Movement in 2020.” In *ASCE Construction Research Congress 2022* (pp. 121-130). [doi/10.1061/9780784483954.013](https://doi.org/10.1061/9780784483954.013)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
15. Oakman, J.,** & **Valdes-Vasquez, R.** (2022). “Preliminary Analysis of Environmental Focus Roofing Strategies in Colorado’s Front Range Region.” In the *ASCE Construction Research Congress 2022* (pp. 131-138). [doi/abs/10.1061/9780784483954.014](https://doi.org/10.1061/9780784483954.014)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
16. Sanford, K. L., Paige, F., Parker, P. J., **Valdes-Vasquez, R.**, Canevari, P.** , Diacik, E.** & Larsen, T. ** (2022). “Re-contextualizing Civil Engineering Education: A Systematic Review of the Literature.” In *Proc. of the American Society for Engineering Education 2022 Annual Conference – Excellence through DIVERSITY*, June 26-29, Minneapolis, MN. <https://peer.asee.org/41666>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
17. Passos Neto, G. M.*, Alencar, L.H., Kohlman Rabbani, E.R., & **Valdes-Vasquez, R.** (2021). “An Analysis of Social Sustainability Indicators using FITradeoff Multicriteria Decision Method.” In the *Virtual 2021 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 457-461). IEEE. DOI: [10.1109/IEEM50564.2021.9672814](https://doi.org/10.1109/IEEM50564.2021.9672814)
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
18. Wilson, C. M. D., Smith-Colin, J. A., Salman, B., & **Valdes-Vasquez, R.** (2021). “Co-Creating a Teaching Module on the Impacts of COVID-19 on Various Transportation Systems and Stakeholders.” In *2021 ASEE Virtual Annual Conference Content Access*. <https://peer.asee.org/36800>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
19. Sanford, K. L., Parker, P. J., Roberts, M. W., Wilson, C. M. D., Penn, M. R., **Valdes-Vasquez, R.**, & Paige, F. (2021, July). “Infrastructure Education in Unprecedented Times: Strengthening a Community of Practice.” In *2021 ASEE Virtual Annual Conference Content Access*. <https://peer.asee.org/37335>
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
20. Klimm, M.** , **Valdes-Vasquez, R.**, & Arneson, E. (2021). “Localized Supply Chain Disruptions: A Case Study on the Effects of the COVID-19 Pandemic on a Commercial Roofing Project.” *EPiC Series in Built Environment*, 2, 37-45. <https://doi.org/10.29007/qd51>

- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
21. Harris, B. **, Valdes-Vasquez, R., & Arneson, E. (2021). "Assessing the Relative Performance of Three Different Fire Resistant Class A Roofing Materials in a High-Altitude Area." *EPiC Series in Built Environment*, 2, 46-54. <https://doi.org/10.29007/9zll>
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
22. **Valdes-Vasquez, R.**, Luxton*, I., & Ozbek, M. E. (2020). "Understanding the Learning Impacts of a Short-Term Study Abroad by Using a Mixed-Method Approach." In: *Proceedings of the 14th Annual International Technology, Education and Development Conference*, 6 pages (Electronic Proceedings with no page numbers), March 2-4, Valencia, Spain. doi: [10.21125/inted.2020.0376](https://doi.org/10.21125/inted.2020.0376)
- [X] Research Design, [] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
23. Villacias Tapia, E.V., Luxton, I*., **Valdes-Vasquez, R.**, Ozbek, M. E., & Ayarza, C. (2020). "Breaking Students' Comfort Zone: Learning from Community Members, a Strategy within the AEC Education." In: *Proceedings of the EURO MED SEC 03 Conference: Holistic Overview of Structural Design and Construction*, EPE.07.01-EPE 07.06, August 3-8, Limassol, Cyprus. (Presented in a Virtual Conference)
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
24. Simmons, D., Kim, A., **Valdes-Vasquez, R.**, & Pearson, N.* (2019). "Are Future Constructors Experiencing a Warm Climate? An Initial Study of Citizenship Status and Affective Engagement." In: *Proc. of the 126th American Society for Engineering Education Conference*, June 16-19, Tampa, FL.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
25. Karaman, D.* , **Valdes-Vasquez, R.**, Strong, K., & Shuller, S. (2019). "Spill Clean-up Recommendations for Emergency Escape Ramps (EERs): Western Mountain DOTs' Perspectives." *Proc. of 55th Annual ASC Inter. Conf.*, April 10-13, 2019, Denver, CO.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
26. Alvis, F.** & **Valdes-Vasquez, R.** (2019). "Challenges of Greywater Systems on College Campuses." *Proceedings of 55th Annual ASC Inter. Conf.*, April 10-13, 2019, Denver, CO.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
27. Mehany, M., Fontana, A., Utter, K., & **Valdes-Vasquez, R.** (2019). "The Development of a Construction Management Summer Program for Young Females – A Case Study." *Proc. of 55th Annual ASC International Conference*, April 10-13, 2019, Denver, CO.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
28. **Valdes-Vasquez, R.**, Clevenger, C., Olbina, S., & Thornes, L. (2018). "Cross-cultural Collaboration Inspired by a Sustainable Building Course in Costa Rica." In: *Proc. of the 125th American Society for Engineering Education Conference*, June 24-27, Salt Lake City, UT.
- [X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
29. **Valdes-Vasquez, R.**, Elliott, J. & Kawulok, S. (2018). "Teaching Vegetative Roofing Systems: An Industry and Academic Collaboration." *Proc. of 54th Annual ASC Inter. Conference*, April 18-21, Minneapolis, MN.
- [X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
30. Mani, M.* , **Valdes-Vasquez, R.** & Strong, K. (2018). "How 4D Visualization and Simulation enhances work zone safety and traffic mobility." In: *Proc. of 54th Annual ASC International Conference*, April 18-21, Minneapolis, MN.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
31. Jebackumar, S.* , **Valdes-Vasquez, R.**, Nobe, M., & Cross, J. (2018). "A Case Study on the Effect of Energy Efficient Design Features on Building." *ASCE Proc. of the 2018 Const. Research Congress*, April 2-5, New Orleans, LA.
- [X] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
32. Zhao, D., **Valdes-Vasquez, R.**, Simmons, D., & Parrish, K. (2018). "Assessing Graduate Education in Research Methodology on Sustainability Topics." In: *ASCE Proc. of the 2018 Const. Research Congress*, April 2-5, New Orleans, LA.
- [X] Research Design, [X] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
33. Mosier, R., **Valdes-Vasquez, R.**, & Reginato, J. (2017). "Implementation of LEED NC (v.2009 and v.4) and Its Effect on Costs in the U.S. Construction Industry." In: *Proc. of 53rd Annual Int. Conference of the Associated Schools of Construction*, April 5-8, Seattle, WA.
- [X] Research Design, [X] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript

34. Gopi, V.*, Senior, B., van de Lindt, J., Strong, K., & **Valdes-Vasquez, R.** (2017). “Carbon Dioxide Equivalency as a Sustainability Criterion for Bridge Design Alternatives.” In: *Proc. of 53rd Annual Int. Conference of the Associated Schools of Construction*, April 5-8, Seattle, WA.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
35. **Valdes-Vasquez, R.**, Simmons, D., Zhao, D., & Parrish, K. (2016). “The Horman Symposium: Developing a Network of Researchers and Mentorship for Sustainability Topics.” In: *ASCE Proc. of the 2016 Construction Research Congress*, May 31- June2, San Juan, Puerto Rico, pp. 1283-1292.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
36. **Valdes-Vasquez, R.**, Nobe, M., Gillaspie, M.*, & Akalp, D.* (2016). “Work-Life Balance Perceptions of Young Project Engineers in the U.S.: Linking Their Career Intentions with Their Supervisor’s Role.” In: *ASCE Proc. of the 2016 Construction Research Congress*, May 31- June 2, San Juan, Puerto Rico, pp. 1988-1997.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
37. Gillaspie, M.*, Nobe, M. & **Valdes-Vasquez, R.** (2016). “Leadership Skills Valued by Project Engineers.” In: *Proc. of 52nd Annual Inter. Conf. of the Associated Schools of Construction*, April 13-16, Provo, UT.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
38. Nobe, M. & **Valdes-Vasquez, R.** (2015). “Use of Student Self-Evaluations to Reinforce the Project Control Cycle.” In: *Proc. of the 122nd American Society for Eng. Education Conference*, June 14-17, Seattle, WA.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
39. Lopez del Puerto, C., **Valdes-Vasquez, R.**, & Nobe, M. (2015). “Using Personal Case Studies to Raise Construction Safety Awareness among Construction Management Students.” In: *Proc. of the 122nd American Society for Engineering Education Conference*, June 14-17, Seattle, WA.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
40. Jaselskis, E., **Valdes-Vasquez, R.**, Kalidindi, S., Krute, L., Guo, H., Comiskey, D., & Nelson, D. (2015). “Successful Academic Partnership in the Development of an International Construction Practices Course.” In: *Proc. of the 2015 American Society for Eng. Education International Forum*, June 14, Seattle, WA.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
41. Clevenger, C., **Valdes-Vasquez, R.**, & Abdallah, M. (2015). “Implementing a Collaboration Activity in Construction Engineering Education.” In: *Proc. of the 7th Int. Conference on Engineering Education for Sustainable Development*, June 9-11, Vancouver, Canada.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
42. Hardy, T.* & **Valdes-Vasquez, R.** (2015). “Toward Meeting the Requirements of High-performance Buildings: A Case Study in the U.S. Federal Government.” In: *ELSEVIER Proc. of the Inter. Conf. on Sustainable Design, Eng. and Construction*, May 10-13, Chicago, IL.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
43. **Valdes-Vasquez, R.**, Lewis, A.*, & Strong, K. (2014). “Assessment of a Rapid Debris Removal System: Implications for Roadway Operations and Maintenance.” In: *Compendium of the 93rd Annual Meetings of the Transportation Research Board*, Jan 12-16, Washington D.C.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
44. Inguva, G.*, Lewis, A.*, Clevenger, C., & **Valdes-Vasquez, R.** (2014). “Teaching Modules Documenting the Development of a Center for Virtual Design and Construction.” In: *Proc. of BIM Academic Symposium*, January 10, Washington D.C.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
45. Miller, M.*, Lopez del Puerto, C., **Valdes-Vasquez, R.**, & Strong, K. (2014). “Comparative Analysis between AIA and DBIA Contract Documents: AIA Document A295 and DBIA Document No. 535.” In: *Proc. of the 121st American Society for Engineering Education Conference*, June 15-18, Indianapolis, IN.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
46. Nobe, M., **Valdes-Vasquez, R.**, & Lewis, A*. (2013). “Management Education Practices as a Tool to Increase Energy Efficiency in Low-Income Housing.” In: *Proc. of 49th Annual Int. Conference of Associated Schools of Construction*, April 10-13, San Luis Obispo, CA.
 Research Design, Data Collection, Data Analysis, Drafted Manuscript, Revised Manuscript
47. **Valdes-Vasquez, R.**, Pearce, A. & Clevenger, C. (2012). “Teaching Social Sustainability in Sustainable Construction and Infrastructure Courses: A Collaborative Approach.” In: *The ASCE Proc. of the 2012 Construction Research Congress*, May 21-23, West Lafayette, IN.

- [X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
48. **Valdes-Vasquez, R.** (2011). "Teaching Safety through Design using a Social Sustainability Module." In: *Proc. of the Annual CIB W099 Conference*, August 24-26, Washington D.C.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
49. Cattano, C.*, **Valdes-Vasquez, R.** & Klotz, L. (2011). "Barriers to the Delivery of Building Renovations for Improved Energy Performance: A Literature Review and Case Study." In: *The ASCE Proc. of the Int. Conference on Sustainable Design and Construction*, March 23-25, Kansas City, MO. [was further selected to be expanded and published in the ASCE J. of Architectural Engineering]
[] Research Design, [] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript

Other Publications (peer-reviewed, * indicates graduate student)

- Luxton, I.*, **Valdes-Vasquez, R.**, & Ozbek, M. (2019). "Understanding the Learning Impacts of a Short-term Study Abroad: A Social Network and Ethnographic Approach." *White Paper shared with the CSU Office of International Programs*.
[X] Research Design, [] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
- Valdes-Vasquez, R.**, Strong, K., & Shuler, S. (2018). "Emergency Escape Ramps (EERs) Improvements." *Technical Research Report published by the Colorado Department of Transportation*, Report No. CDOT-2018-20.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript
- Strong, K. & **Valdes-Vasquez, R.** (2014). "CDOT Rapid Debris Removal Research Project." *Technical Research Report published by the Colorado Department of Transportation*, Report No. 050.00 CDOT-2013-14.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
- Valdes-Vasquez, R.**, Blizzard, J., and Smith, A.* (2013). "**Teaching Module** - Design Charrette: An Important Tool for the Development of Sustainable Construction Projects. *Center for Sustainable Engineering - Virtual Library*. <https://csengin.syr.edu/>
[X] Research Design, [X] Data Collection, [X] Data Analysis, [] Drafted Manuscript, [X] Revised Manuscript
- Valdes-Vasquez, R.** and Klotz, L. (2010). "**Teaching Module**: Social Dimensions of Sustainability During Construction Project Design." *Center for Sustainable Engineering - Virtual Library*. <https://csengin.syr.edu/>
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Drafted Manuscript, [X] Revised Manuscript

CONTRACTS AND GRANTS

Externally-Funded Projects as a PI

- (2021-2024) **Valdes-Vasquez, R.** (PI). Collaborative: Expanding the Capacity of the Center for Infrastructure Transformation and Education through Integrating DEI into Infrastructure Education, National Science Foundation (NSF) Award# 2121436, \$59,980. (Interdisciplinary).
Note: The total cost of this NSF collaborative grant was \$300,000, including UW-Platteville as a lead submission (Award# 2121326, \$92,074), VT (Award# 2121429, \$87,045), and Lafayette College (Award# 2121376, \$60,899).
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management
- (2018-2019) **Valdes-Vasquez, R.** (PI), Strong, K. (Co-PI) and Shuler, S. (Co-PI). Emergency Truck Ramp Improvements, Colorado Department of Transportation (CDOT) Study #316-02, \$89,905.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management.
- (2017-2018) **Valdes-Vasquez, R.** (PI) and Araujo, C. (Co-PI). Analysis of a Case Study to understand the development of a safe, well-organized site layout plan. AGC Education & Research Foundation (AGCERF), \$9,000.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management

Externally-Funded Projects as a Co-PI

- (2023) Somero Concrete Installation Life-Cycle Assessment (LCA). Collaborators: Dunbar, B. (IBE PI), Quinn, J. (ME Co-PI) and **Valdes-Vasquez, R.** (CM Co-PI). Funded by Somero Corporation, \$43,645. (Interdisciplinary).
[X] Research Design, [] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management
- (2017) Strong, K. (PI), **Valdes-Vasquez, R.** (Co-PI) and Shuler, S. (Co-PI) Emergency Truck Ramp Improvements, Colorado Department of Transportation (CDOT) Study #316-02, \$89,905.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management

- (2013-2014) Strong, K. (PI) and **Valdes-Vasquez, R.** (Co-PI). Best Practices for Debris Removal, Colorado Department of Transportation (CDOT), \$44,352.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management

Externally-Funded Projects as PI (Under Review)

- (2025-2029). **Valdes-Vasquez, R.** (PI). Collaborative: Understanding a National Faculty Community of Practice for Transforming Engineering Education through Infrastructure Equity, National Science Foundation (NSF), \$474,465. (Interdisciplinary).
Note: The total budget of this collaborative Institutional and Community Transformation (ICT) Level 2 IUSE NSF grant is estimated at \$1,199,960, including VT as a lead submission (\$784,800), UW-Platteville (\$431,700), and Lafayette College (\$308,995).
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management

Externally-Funded Projects as a Co-PI (Under Review)

- (2024-2025). Paige, F. (PI at Virginia Tech), **Valdes-Vasquez, R.**, (CoPI), Sanford, K. L. (CoPI), & Parker, P. (CoPI). Community Workshop: Transformation Strategies for Empowering Infrastructure Educators to Integrate DEIJ, National Science Foundation (NSF), \$95,500 (Interdisciplinary).
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management

Internally-Funded Awards

- (2022) GRA Cost-Share Funding – NSF project. **Valdes-Vasquez, R.** (PI), Department of Construction Management, \$7,655 (Interdisciplinary).
- (2021-2022) How Teaching Teams Can Use Canvas Tools For Student Outreach. Harvey, A. (PI), **Valdes Vasquez, R.** (Co-PI), and Faw, M. (CoPI). College of Health and Human Science - Research on Excellence and Innovation in Teaching and Learning Pilot Grants, \$2,955. (Interdisciplinary).
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management
- (2020-2022) Resilient Industry Supply Chains (RISC), Arneson, E. (Co-PI), **Valdes-Vasquez, R.** (Co-PI), and Hussam Mahmoud (Co-PI), SoGES, 30,000. (Interdisciplinary).
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management
- (2018-2019) Integrating Virtual Reality to Enhance Construction Management (CM) and Civil Engineering (CE) Education, Olbina, S. (PI), Attadero, B. (Co-PI), Elliott, J. (Co-PI), **Valdes-Vasquez, R.** (Co-PI), and Killingsworth, J. (Co-PI), CSU Office of the Vice President for Research (OVPR), CHHS, CE Department, and CM Department, \$93,294.
[X] Research Design, [] Data Collection, [X] Data Analysis, [X] Dissemination, [] Project Management
- (2018-2019) An ethnographic study on high impact learning during a short study abroad program, Luxton, I.* (PI), **Valdes-Vasquez, R.** (Co-PI), CSU Office of International Programs, \$2,000.
[X] Research Design, [] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management
- (2018) CSU Office of International Programs (OIP), **Valdes-Vasquez, R.** (PI), \$1,500. This grant supports the development of best practices in Education Abroad Programs at CSU.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [] Dissemination, [] Project Management
- (2016) CSU Graduate School Recruitment Mini-Grant, **Valdes-Vasquez, R.** (PI), \$600. The CSU Graduate School provided this award to faculty to recruit top qualified graduate students.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management
- (2013-2014) CSU College of Applied Human Sciences (renamed College of Health and Human Sciences) Mini-Grant, **Valdes-Vasquez, R.** (PI) and Clevenger, C. (Co-PI), \$8,000. The funds allowed to support GRA, travel to NSF offices and develop an NSF proposal.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management
- (2013-2014) Trades Curriculum Development, GE Johnson, **Valdes-Vasquez, R.** (PI) and Elliot, J. (Co-PI), \$20,000. This award was used to support GRA and assess the construction company's needs.
[X] Research Design, [X] Data Collection, [X] Data Analysis, [X] Dissemination, [X] Project Management
- (2014) SoGES - Sustainability Education Improvement (SEI) Grant, **Valdes-Vasquez, R.** (PI), \$1,500. The SEI Grant allows faculty to develop courses with a sustainability perspective and bring sustainability into existing courses. These funds were also used to attend the Association for the Advancement of Sustainability in Higher Education (AASHE) conference in Portland, Oregon.
- (2014) CSU Graduate School Recruitment Mini-Grant, **Valdes-Vasquez, R.** (PI), \$1,000. The CSU Graduate School provided this award to faculty to recruit top qualified prospective graduate students to visit CSU and the Construction Management Department.

Un-Funded Externally/Internally Projects as a PI or Co-PI

1. (2023) Mega-Scale Supply Chain Analysis to Assess the Dynamic Impact of Wildfires on Timber Production and Residential Housing Markets. Mahmoud, H. (PI), **Valdes-Vasquez, R.** (Co-PI), and Arneson, E. (Co-PI). Submitted to NSF, \$ 724,477.
2. (2023) NCRHP 23-13 (03): Guide on Truck Rest and Service Areas for Critical Supply Chain Delivery, Kang, K. (PI), Besiktepe, D. (Co-PI), Monteiro, H. (Co-PI), Sparkling, A. (Co-PI), & **Valdes-Vasquez, R.** (Co-PI). National Cooperative Highway Research Program, \$180,000.
3. (2023) US DOT - University Transportation Center (UTC) – Region 8: Resilient, Equitable, and Sustainable Environment through Transportation (RESET). Dashti, S. (PI) as lead/grantee institution CU Boulder CEAE, other consortium members (Colorado State University, Colorado School of Mines, UC-Denver, MSU, BYU, Univ. of Wyoming, and Montana State University). **Valdes-Vasquez, R.** (Co-PI) has two proposed projects: *i*) Project 2.D - Measuring the institutional legacy and current policy regimes of disproportionate transportation and climate burdens, and *ii*) Project 3.C - A community-driven mixed method approach to crisis management and recovery in a changing climate.
4. (2022) NCHRP Synthesis Topic 54-13: Truck Escape Ramp Design and Operation. Besiktepe, D. (PI), **Valdes-Vasquez, R.** (Co-PI), Kononov, J. (Co-PI), and Tummalapudi, M. (Co-PI), National Cooperative Highway Research Program, \$55,000. (Interdisciplinary)
5. (2021) CornCrete Masonry Blocks for Sustainable Construction. Collaborators: Mahmoud Shakouri, M. (PI) and **Valdes-Vasquez, R.** (Co-PI). Submitted to CSU Ventures Fuel Program, \$150,000.
6. (2020) Collaborative Research: Modeling Construction Organizations' Resilience in Response to Societal and Economic Impacts. Simmons, D. (PI at UF and lead institution), **Valdes-Vasquez, R.** (PI at CSU), Gambatese, J. (PI at OSU), Jamison, M., Polmear, M., and Wang, P. (co-PIs at UF). NSF Division of Chemical, Bioengineering, Environmental, & Transportation Systems, \$380,000. (Interdisciplinary)
7. (2020) RAPID: Modeling Essential Organizations' Responses to Traumatic Societal Impacts. Simmons, D. (PI at UF), **Valdes-Vasquez, R.** (Co-PI at CSU), Gambatese, J. (Co-PI at OSU), and Polmear, M. (Co-PI at UF). NSF Division of Chemical, Bioengineering, Environmental, & Transportation Systems, \$200,000. (Interdisciplinary)
8. (2020) Enhance Disaster Risk Reduction and Adapt to Climate Change Using Nature-Based Solutions. Arneson, E. (PI), **Valdes-Vasquez, R.** (Co-PI), and Mahmoud, H. (Co-PI). STIR Labs City Innovate Challenge – sponsored by the National Science Foundation (NSF) EAGER grant program, \$10,000 (Interdisciplinary and Engagement)
9. (2018) A Study of the U.S. Roofing Industry and its Workforce, Olbina, S. (PI) and **Valdes-Vasquez, R.** (Co-PI), National Roofing Contractors Association (NRCA), \$69,643.
10. (2017) Implementing 4D Visualization of Construction Work Zones for CO7 -- south of Estes Park, **Valdes-Vasquez, R.** (PI) and Kelly Strong (Co-PI), Colorado Department of Transportation, \$69,000. [Top five finalist]
11. (2017) Testing 4D Visualization of Construction Work Zones, **Valdes-Vasquez, R.** (PI), CSU College of Health and Human Science (CHHS) Mini-Grant, \$7,000.
12. (2016) Learning BIM Practices during the Preconstruction Phase – Understanding the Benefits and Limitations, **Valdes-Vasquez, R.** (PI), Araujo, C. (Co-PI), Olbina, S. (Co-PI), and Grant, J. (Co-PI), AGC Education & Research Foundation (AGCERF), \$9,000.
13. (2016) Cuba-New American West Sustainability Program, Cespedes, K. (PI), Sagas, E. (Co-PI), and **Valdes-Vasquez, R.** (Co-PI), US Embassy in Cuba, \$97,425.
14. (2016) Increasing Cultural Awareness of Challenges Facing Indian Students Working in the US construction Industry. Nobe, M. (PI), **Valdes-Vasquez, R.** (Co-PI), Elliott, J. (Co-PI), and Strong, K. (Co-PI), CSU College of Health and Human Science (CHHS) Mini-Grant, \$10,000.
15. (2016) Investigation of Work-Life Balance Challenges Faced by US Construction Professionals and the Impact on their Career Intentions, Nobe, M. (PI) and **Valdes-Vasquez, R.** (Co-PI), CSU College of Health and Human Science (CHHS) Mini-Grant, \$10,000.
16. (2015) Collaborative Research: REE - Understanding the Development of Collaboration Skills in Engineering and Construction Programs, **Valdes-Vasquez, R.** (PI) and Clevenger, C. (PI), National Science Foundation, \$160,326 of \$298,434.
17. (2014) Automated Cone Placement and Retrieval, Strong, K. (PI) and **Valdes-Vasquez, R.** (Co-PI), Colorado Department of Transportation (CDOT), \$40,492.
18. (2014) BIM Integration within CON 265 and 365 -- Construction Estimating Courses, Wilkes, J. (PI), **Valdes-Vasquez, R.** (Co-PI) and Elliott, J.W. (Co-PI), Provost's Course Redesign Competition, the Institute for Teaching and Learning (TILT), Colorado State University, \$5,000.

19. (2013) Wyoming Energy Sector Pathways (WESP), Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grants Program, Elliott, J. W. (PI) and **Valdes-Vasquez, R.** (Co-PI), U.S. Department of Labor, Employment and Training Administration, \$537,514 of \$10,545,000.
20. (2013) Factors Contributing to Environmental, Sustainable, and Energy-Related Post-Secondary Education and Career Choices, Elliott, J. W. (PI), **Valdes-Vasquez, R.** (Co-PI), Barry, N. (Co-PI), Killingsworth, J. (Co-PI), United States Environmental Protection Agency – Region 8, \$114,580 of \$240,580.
21. (2013) Environmental Education for Encouraging STEM Education. Barry, N. (PI), Elliott, J. W. (Co-PI), **Valdes-Vasquez, R.** (Co-PI), and Killingsworth, J. (Co-PI), United States Environmental Protection Agency – Region 7, \$105,189 of \$240,130.
22. (2013) Tier 1 UTC- STIC2: Building Sustainability into Transportation Const. from Theory to Practice. Goodrum, P. (lead PI at CU Boulder); Colorado State University Co-PIs included Ozbek, M., Clevenger, C., Chen, S., Strong, K., and **Valdes-Vasquez, R.** U.S. Department of Transportation UTC program.
23. (2013) Green Construction Program for vulnerable youths in marginalized communities in Panama, Lopez del Puerto, C. (PI) and **Valdes-Vasquez, R.** (Co-PI), US Embassy in Panama, \$199,256.

Other Research Projects (outside of CSU)

Principal Investigator or Co-PI

1. (2009-2012) *Incorporating Social Sustainability into Civil Engineering and Construction Management Education*, **Valdes-Vasquez, R.** (PI). Collaborators: Dr. Leidy E. Klotz, Dr. Annie Pearce, and Dr. Caroline Clevenger. ~\$7,500.
2. (2008-2011). *Social Sustainability Considerations during Planning and Design: A Framework of Processes for Construction Projects*, **Valdes-Vasquez, R.** (PI) and Klotz, L. (Co-PI), SENACYT, \$110,000,
3. (2006-2007) *Guidelines for Creating Construction Safety Programs in Panama*. **Valdes-Vasquez, R.** (PI), Construction Chamber of Panama, ~\$1,000.
4. (2005-2007) *The Correlation Between Safety Training Program Attributes and Safety Performance Metrics for General Contractors in North and South Carolina*, **Valdes-Vasquez, R.** (PI), Fulbright, \$40,000.
5. (1999) A. *Evaluation of the Guidelines in Designing of Pavements in Panama by the AASHTO Method*, **Valdes-Vasquez, R.** (Co-PI), Hernandez, E. (Co-PI), and Urena, C. (Co-PI), Technological University of Panama and Derivados del Petroleo S.A., ~\$5,000.

As Investigator or another role other than PI or Co-PI

1. (2011-2012) *CAREER: Modeling Irrationalities of Designers To Support Their Decisions for Net-Zero Energy Buildings*. Klotz, L. (PI). NSF, \$412,000. Role: **Valdes-Vasquez, R.** (Post-Doctoral Research Associate), Glenn Department of Civil Engineering, Clemson University.
2. (2011-2013) *Resilient Homes Program*, Klotz, L. (PI), Smail, T. (Co-PI). Oak Ridge National Laboratory, \$1,060,000. Role: **Valdes-Vasquez, R.** (Post-Doctoral Research Associate), Glenn Department of Civil Engineering, Clemson University.
3. (2008-2009) *Clemson Work Boot Productivity Study*, Piper, C. (PI), Liska, R. (Co-PI), & Bausman, D. (Co-PI). W.L. Gore & Associates, Inc., \$30,000. Role: **Valdes-Vasquez, R.** (Graduate Research Assistant), CSM Department, Clemson University.
4. (2002-2003) *The Road Inventory of the Pan-American Highway - Chiriqui Grande Project* Anguizola, I. (PI) & Harris, A. (Co-PI). Panama DOT, \$10,000. Role: **Valdes-Vasquez, R.** (Research Associate), Department of Civil Engineering, Technological University of Panama.
5. (2002- 2003) *Normalization and Certification of Labor Competence Pilot Project*, Blake, N. (PI). Cámara Panameña de la Construcción, ~\$3,000. Role: **Valdes-Vasquez, R.** (Research Associate), Department of Civil Engineering, Technological University of Panama.

PAPERS PRESENTED/SYMPOSIA/INVITED LECTURES/PROFESSIONAL MEETINGS/WORKSHOPS

Note: Below are papers presented in a conference in addition to all of the papers listed under the title “**Refereed Proceedings/Transactions**” that were also presented in conferences.

Conference Presentations with Refereed Abstracts:

1. June, 2019. “Case study: High impact learning and social network analysis in a short-term education abroad program.” *Colorado/Wyoming International Educators Conference*, Denver, CO.
2. April, 2017. “The current status of green design and construction related to fire stations in the US.” *Engineering Sustainability 2017*, Pittsburgh, PA.

3. October, 2015. "Cross-cultural collaboration and life-long learning inspired by a sustainable building course in Costa Rica." *The 2015 Association for the Advancement of Sustainability in Higher Education (AASHE) Conference*, Minneapolis, MN.
4. April, 2015. "Perceived value of using BIM for energy simulation" *Engineering Sustainability 2015*, Pittsburgh, PA.
5. April, 2013. "Social sustainability framework: A series of processes for evaluating infrastructure projects." *Engineering Sustainability 2013*, Pittsburgh, PA.
6. January, 2010. "Integrating social aspects during the design of sustainable projects." *The 6th International Conference on Environmental, Cultural, Economic, and Social Sustainability*, Cuenca, Ecuador.

Invited Presentations:

1. April 3, 2024. The 1st ASC Doctoral Forum – Faculty Panel "Preparing for a Faculty/Industry Interview." *60th Annual ASC Conference*, Auburn, AL. This panel aimed to equip doctoral students with valuable insights and strategies to navigate the interview process as they transition into academia or industry roles.
2. September 1, 2023. "An Introduction to Social Sustainability in Construction Projects." Virtual Guest Speaker at the *Global Construction Engineering and Management Practices* course that is hosted at North Carolina State University. Dr. Ed Jaselskis invited me to speak about Social Sustainable. This year, this course collaborates with three international universities (China--Tianjin and Tsinghua; Thailand--Chiang Mai University; and Africa--the University of Lagos in Nigeria).
3. November, 18, 2021. "Getting Support to Implement FFW Workshops." Guest Speaker at the *CSU 2nd Cohort FFW Train the trainer workshop*, Fort Collins, CO.
4. September 3, 2021. "Human-Centered Design Process for Equitable Construction." Virtual Guest Speaker at the *Global Construction Engineering and Management Practices* course that is hosted at North Carolina State University. Dr. Ed Jaselskis invited me to speak to the Global Construction class about sustainable construction using human-centered design techniques. This course collaborates with three international universities (China--Tianjin and Tsinghua; Thailand--Chiang Mai University; and Africa--the University of Lagos in Nigeria).
5. July 30, 2020. "Real-World Problems as Inspiration for Research." Keynote Speaker at the *CSU Summer REU Program* hosted by Dr. Paul Laybourn, Fort Collins, CO. The presentation was a retrospective of my research experiences and career path since I was an undergraduate student until some of my recent studies. The talk also covered the researchers' role and the skills needed to complete research projects.
6. April 23, 2020. "High Impact Learning Experiences during a Sustainable Building Program in Costa Rica." Invited Speaker - *Forum's 16th Annual Conference and Award Recipient* - Excellence in Education Abroad Curriculum Design. For more details, check the following link: <https://forumea.org/award-for-excellence/>
7. January 17, 2020. "An Introduction to Human-Centered Design." Virtual Guest Speaker at the *Global Construction Engineering and Management Practices* course that is hosted at North Carolina State University. Dr. Ed Jaselskis invited me to speak to the *Global Construction* class about sustainable construction using human-centered design techniques. This course collaborates with three international universities (China--Tianjin and Tsinghua; Thailand--Chiang Mai University; and Africa--the University of Lagos in Nigeria).
8. November, 2019. "Interdisciplinary Solutions in Sustainability." A discussion with the Student *Sustainability Center*, Fort Collins, CO.
9. October, 2019. "Faculty Panel -- opportunities and challenges as first generations." *5th Annual TRIO SSS Graduate School Conference*, Fort Collins, CO.
10. September, 2018. "High Impact Learning Experiences during a Sustainable Building Course in Costa Rica." *CSU Office of International Programs*, this was a presentation for faculty interested in leading study abroad programs, Fort Collins, CO.
11. March, 2018. "High Impact Learning Experiences during a Sustainable Building Course in Costa Rica." *CSU's Education Abroad Advisory Committee (EAAC)*, presented at the monthly meeting hosted by Office of International Programs, Fort Collins, CO.
12. December, 2017. "Energy and the Built Environment: An Introduction to Green Rating Systems." Guest lecturer in the *Sustainable Energy (GES 141)* taught by Dr. John J. Sheehan, and Global Sustainability Course taught by Matthew Juneau, Fort Collins, CO.
13. April, 2017. "Implementing 4D Visualization of Construction Work Zones for CO-7, south of Estes Park." Research Presentation to *Colorado Department of Presentation*, Denver, CO.

14. December, 2016. “Energy and the Built Environment: An Introduction to Green Rating Systems.” Guest lecturer in the *Sustainable Energy (GES 180)* taught by Dr. Ken Reardon, Fort Collins, CO.
15. June, 2016. “Join a big program or a small one? What are the opportunities and challenges?” Panelist of the *Prospective and Junior/Underrepresented Minorities and Women Faculty Panel Session* organized by the 2016 Construction Research Congress, San Juan, Puerto Rico.
16. October, 2013 and 2015. “Video conference: Social sustainability applications.” Guest lecturer in the *Sustainable Construction Course* taught by Dr. Emilia Kohlman Rabbani from the Polytechnic School of Engineering of UPE, Recife, Pernambuco – Brazil.
17. March, 2015. “Environmental Justice & the Built Environment.” Panelist of the *Environmental Justice CSU Roundtable Series*. This faculty roundtable was hosted by Environmental Justice CSU, which was a SoGES Global Challenge Research Team (GCRT), Fort Collins, CO.
18. October, 2014. “Introduction to Sustainable Design and Construction in Costa Rica.” Faculty Panel in the session *What Can an Education Abroad Teach Our Future Leaders about Sustainability?* This panel was part of the *Inter. Colloquium on Global Envir. Sustainability: Vision of Future Earth*, Fort Collins, CO.
19. September, 2014. “Sustainable Buildings – Study Abroad Program in Costa Rica.” Panelist in the *International Design Day; Shaping Our World through Design* being led organized by the International Design Association, Fort Collins, CO.
20. March, 2013 and October, 2014. “Video conference: Panamanian Construction Practices.” Guest lecturer in the *International Construction Practices Course* being led by a team of universities including Tsinghua, Tianjin, Indian Institute of Technology at Madras, University of Calgary, and North Carolina State Univ.
21. October, 2012. “Opportunities to quantify social sustainability processes.” *Science behind Sustainability Quantification for Building and Infrastructure Design, Engineering and Construction (S2QBIDEC)*. Workshop panelist, Fort Worth, TX.
22. September, 2011. “Social sustainability in development of construction projects.” Guest lecturer in *Sustainable Construction (CE 456/656)* taught by Dr. Leidy Klotz at Clemson University, *Sustainable Practices in Design and Construction (CON 476)* taught by Dr. Caroline Clevenger at CSU, and *Sustainable Infrastructure Systems (BC 5144)* taught by Dr. Annie Pearce at VT.
23. April, 2010. “Research approach for developing a conceptual model for social sustainability.” *The Michael Horman Sustainable Construction Symposium*, Blacksburg, VA.
24. September, 2009. “Introducing social aspects during the design of sustainable projects.” *The 2009 SACNAS National Conference*, Dallas, TX.
25. November, 2010. “Research experiences and concept mapping approach to build a framework for social sustainability.” Guest lecturer in *the Methods in Construction Research (CNST 5084)* taught by Dr. Annie Pearce, Virginia Tech, Blacksburg, VA.

Posters with Refereed Abstracts: (* indicates graduate student, ** indicates undergraduate student)

1. **Valdes-Vasquez, R.**, Sanford, K. L., Paige, F., & Parker, P. J., &. (2024). “WIP – Fostering Team Science in an Engineering Education Research Team.” Also, included a paper published at *2024 ASEE Annual Conference & Exposition*, June 23-26, Portland, OR.
2. DeLong, A. **, and **Valdes-Vasquez, R** (April 2024). “Pilot Study: Implementing Integrated Model-Based Estimating.” Celebrate Undergraduate Research and Creativity (CURC), April 17, Fort Collins, CO.
3. Sanford, K. L., Paige, F., Parker, P. J., & **Valdes-Vasquez, R.** (2023). “WIP – Community of Practice as a Theory of Change for Infrastructure Education.” Also, included a paper published at *2023 ASEE Annual Conference & Exposition*, June 25-28, Baltimore, MD.
4. **Valdes-Vasquez, R.**, Sanford, K. L., Paige, F., & Parker, P. J. (2023). ”WIP: Assessing a Faculty Community of Practice and Identifying Its Opportunities to Enhance Equitable Infrastructure Education.” Also, included a paper presented at *2023 ASEE Annual Conference & Exposition*, June 25-28, Baltimore, MD.
5. Puletapuai*, C., **Valdes-Vasquez, R**, Birmingham, D., Sanford, K.L., Parker, P. J., & Paige, F. “The Formation of an Educational Community Practice: An Analysis in a Virtual Setting.” 2022 ASEE Annual Conference, June 26-29, 2022, Minneapolis, MN.
6. Sanford, K. L., Parker, P. J., Paige, F., & **Valdes-Vasquez, R.** “Re-contextualizing Civil Engineering Strengthening a Community of Practice to Transform Infrastructure Education.” Transportation Research Board 101st Annual Meeting, January 9-13, 2022, Washington, DC.
7. Oakman, J. **, and **Valdes-Vasquez, R** (April 2021). “Implementation of Sustainable Roofing Strategies in the Front Range Region.” Research in Progress Abstracts accepted at 57th ASC Annual International Conference (virtual).
8. Srijesh, P. *, Arneson, E. and **Valdes-Vasquez, R** (March 2020). “Modeling Regional Patterns of Post-Disaster Permanent Housing Reconstruction Outcomes in the U.S.” Research in Progress Abstracts accepted at 56th ASC Annual International Conference (virtual).

9. Burgoon, J.B., Arneson, E., Hosanny**, V., **Valdes-Vasquez, R.** (2020). "A Visual Ethnographic Evaluation of Land Grant Construction Programs: Who is Valued in Construction Education?" Research in Progress Abstracts accepted at 56th ASC Annual Int. Conf. (virtual).
10. Harris, B.** and **Valdes-Vasquez, R.** (March 2020). "Assessing Fire Resistant Roofing for Colorado Residential Homes." 2020 Celebrate Undergraduate Research and Creativity (CURC), March 10, Fort Collins, CO.
11. Besiktepe, D.*, **Valdes-Vasquez, R.**, Strong, K., and Shuller, S. (January 2020). "Operation and Maintenance Recommendations for Emergency Escape Ramps Located in Mountain States." Transportation Research Board 99th Annual Meeting, January 12-16, 2020, Washington, DC.
12. Pradhan, S.*, Arneson, E., and **Valdes-Vasquez, R.**, (November 2019). "Modeling Regional Patterns of Post-Disaster Permanent Housing Reconstruction in the U.S." *CSU Graduate Student Showcase*, November 12, Fort Collins, CO.
13. Sobotka, W.** and **Valdes-Vasquez, R.** (April 2019). "Bamboo Construction in the Tropical Regions." 2019 Celebrate Undergraduate Research and Creativity (CURC), April 15, Fort Collins, CO.
14. Vaidya, R.** and **Valdes-Vasquez, R.** (April 2019). "Life Cycle Analysis of a Simple Wastewater Management System for LBC Building in Colorado." 2019 Celebrate Undergraduate Research and Creativity (CURC), April 15, Fort Collins, CO.
15. Karaman, D.*, **Valdes-Vasquez, R.**, Strong, K., and Shuller, S. (April 2019). "Developing Operation and Maintenance Recommendations for Runaway Truck Ramps." April 12, 55th Annual ASC Inter. Conference, Denver, CO.
16. **Valdes-Vasquez, R.**, Olbina, Svetlana, Clevenger, C., and Thornes, L. (June, 2018). "Cross-cultural Collaboration Inspired by a Sustainable Building Course in Costa Rica." *The 125th American Society for Engineering Education Conference, Salt Lake City, UT. (Awarded 1st Place)*.
17. Alvis, F.** and **Valdes-Vasquez, R.** (April, 2018). "Challenges of Greywater Design and Its Implementation on Colleges Campuses." *CSU Celebrate Undergraduate Research and Creativity*, Fort Collins, CO.
18. Merkey, T.**, Alvis, F.**, and **Valdes-Vasquez, R.** (November, 2017). "Understanding the Implementation of Water Reuse Technologies for LBC projects and its Applicability in the State of Colorado." *Symposium for Sustainable Infrastructure organized by ASCE Colorado Section, Boulder, CO. (2nd Place)*.
19. Merkey, T.** and **Valdes-Vasquez, R.** (April, 2017). "Understanding the Implementation of Water Reuse Technologies for LBC projects and its Applicability in the State of Colorado." *Engineering Sustainability 2017 - Innovation and the Triple Bottom Line*, Pittsburgh, PA.
20. **Valdes-Vasquez, R.** and Rokde, P.* (April, 2017). "The Green Status of Fire Stations in the US." *The 53rd Annual Int. Conference of the Associated Schools of Construction*, Seattle, WA.
21. Jebackumar, S.* and **Valdes-Vasquez, R.** (April, 2015). "Identifying Metrics for Measuring Stakeholder Engagement in Net-zero Energy Buildings." *Engineering Sustainability 2015 - Innovation and the Triple Bottom Line*, Pittsburgh, PA.
22. Hughes, E.* and **Valdes-Vasquez, R.** (April, 2014). "Identifying Non-Technical Barriers to Compressed Earth Block Construction in the North Carolina Piedmont." *The 50th Annual Int. Conference of the Associated Schools of Construction*, Washington, DC.
23. Shaffer, W.**, **Valdes-Vasquez, R.**, and Clevenger, C. (April, 2014). "Sustainable Building Practices of Las Lomas Costa Rica." *CSU Celebrate Undergraduate Research and Creativity (CURC) Showcase*, Fort Collins, CO.
24. **Valdes-Vasquez, R.**, Klotz, L., Shealy, T.*, Lock, R., Godwin, A.*, Hazari, Z., and Potvin, G. (April, 2013) "Pro-sustainability Attitudes and Behaviors in College Students: The Need for AEC Programs to Connect Sustainability with Helping Others." *Engineering Sustainability 2013 - Innovation and the Triple Bottom Line*, Pittsburgh, PA.
25. Lewis, A.*, **Valdes-Vasquez, R.**, and Nobe, M. (April, 2013). "The Perception of Property Managers on Educating Low-income Housing Tenants about Energy Efficiency in Colorado." *Engineering Sustainability 2013 - Innovation and the Triple Bottom Line*, Pittsburgh, PA.
26. **Valdes-Vasquez, R.** (April, 2011). "The Implementation of a Social Sustainability Teaching Module: An Innovative Approach used in a Sustainable Construction Course." *The 47th Annual Int. Conference of the Associated Schools of Construction*, Omaha, NE.

Research-related Professional Workshops Attended:

- 2024, Working with the Department of Defense Research Workshop, Fort Collins, CO.
- 2024, Improving Undergraduate STEM Education (IUSE) Summit, NSF, Washington, DC.

2023, NSF Workshop in Research Initiation in Engineering Formation (RIEF) and Mid-Career Advancement (MCA) programs, Baltimore, MD
 2023, Summer Faculty Writing Retreat, CSU Writes, Fort Collins, CO
 2023, Spring NSF Grants Conference, NSF, Virtual.
 2022, Summer Faculty Writing Retreat, CSU Writes, Fort Collins, CO
 2022, Improving Undergraduate STEM Education (IUSE) Summit, NSF, Washington, DC.
 2021, GRANT Writes Retreat, CSU Writes, Virtual.
 2017, CHHS Grant writing workshop, CSU CHHS, Fort Collins, CO.
 2016, Early Career Investigator Grant Seminar, CSU Office of Vice President for Research, Fort Collins, CO.
 2015, Presenting Data and Information Workshop, Denver, CO.
 2013, Write Winning Grant Proposals Seminar & Workshop, CSU College of Applied Human Sciences (CAHS), Fort Collins, CO.
 2012, National Science Foundation (NSF) Proposal Writing Workshop, Charlotte, NC.

Symposiums/Congress Organized/Chaired:

1. CI-E (Center for Infrastructure Transformation and Education) virtual Workshop: Teaching Future Engineers about Equitable Infrastructure. (August 7-8, 2023)
2. CIT-E virtual Workshop: Infrastructure Engineering as a Social and Community-Based Practice (August 9-10, 2022).
3. CIT-E virtual Workshop: Talking about Diversity, Equity, and Inclusion with Civil and Environmental Engineering Students (August 10-11, 2021).
4. Engineering Sustainability 2019, Pittsburgh, PA. Organizing Committee Member (2018-2019).
5. Engineering Sustainability 2017, Pittsburgh, PA. Organizing Committee Member (2016-2017).
6. Michael Horman Symposium, Pittsburgh, PA. Organizing Committee Member (2015 & 2017).

COLLABORATIVE, INTERCOLLEGIATE & INTERDISCIPLINARY SCHOLARSHIP

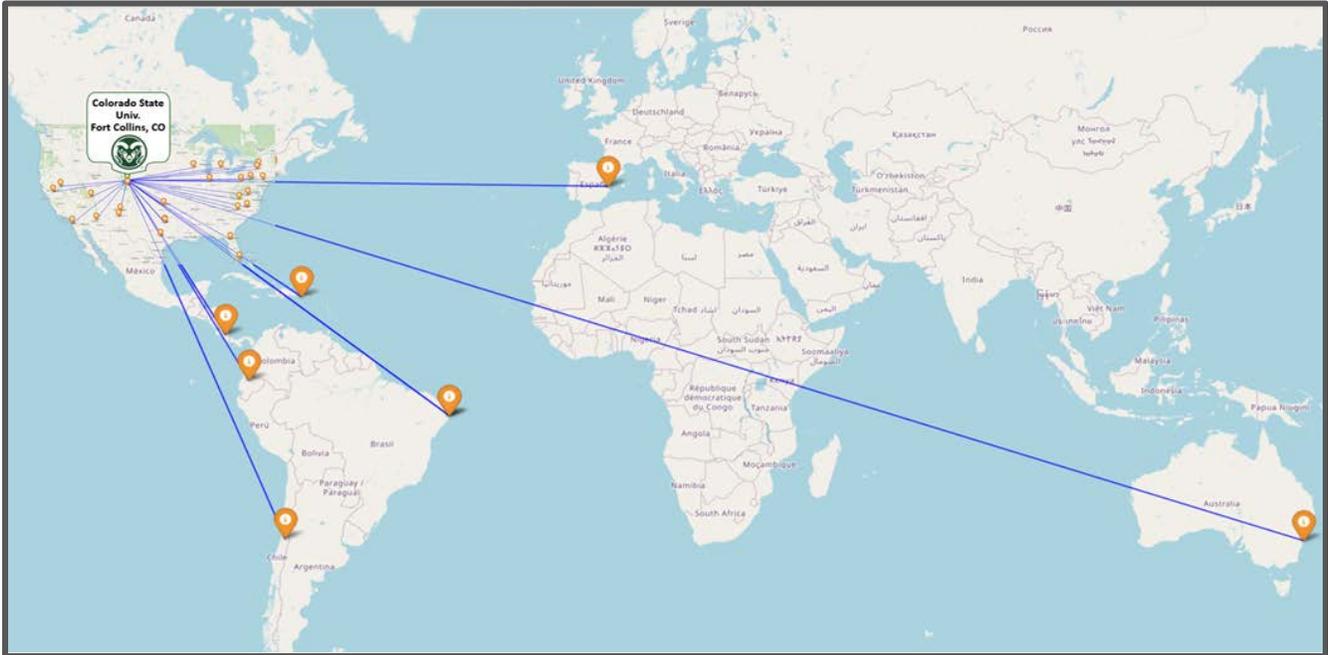
Reflecting on my scholarship work, **I have demonstrated leadership in research** through my involvement in various externally and internally funded projects by securing and managing grants advancing construction management, engineering design, sustainability, and construction/engineering education. **As a PI**, I have managed projects end-to-end, including research design, data collection & analysis, dissemination, and project management (budget, schedule, and interim and final reports). My PI role in projects such as the *NSF IUSE Capacity Building grant* focused on integrating DEI into infrastructure education and the *Colorado Department of Transportation (CDOT) studies* has advanced my research and led to practical implementations of escape ramps in Colorado. **As a Co-PI**, I have taken on leadership roles in interdisciplinary collaborations, contributing significantly to research design, data analysis, and dissemination, such as in the *Somero Concrete Installation LCA* and various CDOT projects. These experiences have allowed me to lead and contribute to impactful research initiatives and enhance the visibility and applicability of my work at CSU.

My leadership in research is also evident in my role as a **co-author and mentor**. I have consistently led the design, analysis, and revision processes across a diverse portfolio of publications. My work spans critical areas, including social sustainability indicators, innovative educational strategies, and industry challenges, such as pre-construction services. For instance, my contributions to publications on applying LEED requirements and BIM for social housing in Brazil highlight the importance of energy solutions and inclusive construction practices. In addition, the systematic review on social sustainability in the built environment and the evaluation of equity in construction education reflect my commitment to incorporating DEISJ principles into my research. These efforts have contributed to the academic community and fostered collaborations with industry stakeholders, bridging the gap between theoretical research and practical applications. Likewise, I have mentored the next generation of scholars by **guiding graduate and undergraduate students** through research design, data analysis, and the publication process, fostering an inclusive and equitable research environment.

My research, in principle, **is collaborative**, as shown in my publications above, particularly those topics related to sustainable buildings and infrastructure in which I integrate practice and theory. Specifically, my *Collaborative NSF IUSE Capacity Building Grant* enabled me to work with a **consortium** of three other universities, including the *University of Wisconsin-Platteville*, *Virginia Tech*, and *Lafayette College*. The grant supports the ongoing work of the *Center for Infrastructure Transformation and Education (CIT-E)* in diversifying infrastructure curriculum. Created over a decade ago, CIT-E is a group of faculty members from across multiple institutions nationwide who share an interest and passion for infrastructure education. Their work has included developing an introductory infrastructure course. As a result, more than 44 teaching modules have been co-created and adopted by dozens of universities across the country. I was responsible for co-creating one in 2020 and I was able to share the results of its implementation at the 2021 ASEE Conference. In addition, the CIT-E members share best practices and resources, and provide mentorship to younger members to adopt or adapt the materials.

I am also well-known for **developing a framework of social sustainability processes** for construction projects, published in the *ASCE J. of Construction Eng. and Management*. This research contribution helps decision-makers understand these processes and their interrelationships by addressing overlooked social considerations in construction projects. **Multiple national and international researchers** have cited my social sustainability framework, opening a new research area that was not fully explored in the construction research community. Based on this recognition, I have been invited to serve on various research panels and as an external committee member for master's theses and doctoral dissertations in other national and international institutions.

I **collaborate with various faculty members** outside of CSU (see map below). As shown in my scholarship record, I have also research in progress or co-authored papers with several past and present research faculty members at CSU. My research is also **interdisciplinary**. Precisely, my scholarship in *social sustainability* and *construction/engineering education* is, by definition, interdisciplinary. These research topics range developing *collaboration skills*, a better understanding of *work-life balance* in construction professionals, a view of *leadership*, and *BIM for energy simulation and estimating*.



Dr. Valdes-Vasquez's collaborators across national and international institutions. (Source: Leaflet | Data by OpenStreetMap, under ODbL.)

OTHER ACTIVITIES/ACCOMPLISHMENTS – PUBLICATION/SCHOLARLY RECORD

- **SoGES Faculty Appointment** - In recognition of my research and teaching in sustainability, I was offered a faculty appointment with the School of Global Environmental Sustainability (SoGES) at CSU. SoGES was established in 2008 to foster interdisciplinary research teams focused on sustainable development issues. In addition, in 2020, I was selected to be part of a **SoGES Global Challenges Research Team**, focusing on the roofing industry and develop a framework for empirically assessing its resilience
- I have been invited to serve as a reviewer for various agencies, including NSF and DOE.
- I have co-organized various **virtual CIT-E** (Center for Infrastructure Transformation and Education) **workshops**, which help faculty incorporate ready-to-use course materials into existing course(s). The CIT-E teaching materials, enough for an entire semester-length 3-credit class, are designed for introducing 1st and 2nd-year students to civil infrastructure and are readily adaptable to many courses. Other CIT-E virtual workshops focused on DEIJ with the goal of creating a space to work with colleagues to co-create learning materials related to equitable infrastructure for a course that they teach. In addition, we have helped attendees learn how to design a publishable project related to developing and implementing the learning materials.
- I have supported the **organization of conferences**, such as the 2017 and 2019 Engineering Sustainability Conference, co-organizer of the Michael Horman Symposium 2015 and 2017, track chair in major conferences (Construction Research Congress & 2016 Inter. Conf. on Sustainable Design, Engineering, and Construction), and reviewer for numerous journals and conferences as listed under the section **“Professional Affiliations and Activities.”**

**CV SECTION 3:
EVIDENCE OF TEACHING AND ADVISING EFFECTIVENESS**

TEACHING:

Year	Semester	Course No.	Course Title	Cr. Hrs.	Enrollment	SCH
2024 [♣]	Spring	CON 101 S1	Introduction to Construction Management	3	38	114
2023	Fall	CON 101 S1	Introduction to Construction Management	3	35	105
		CON 101 S2	Introduction to Construction Management	3	45	135
2023	Spring	CON 101 S1	Introduction to Construction Management	3	35	105
		CON 503	Research in Construction Management II	3	7	21
2022 [♣]	Fall	CON 101 S1	Introduction to Construction Management	3	42	126
2022	Spring	CON 265 S1	Plan Reading and Quantity Survey	2*	17	34
		CON 265 S2	Plan Reading and Quantity Survey	2*	28	56
		CON 265 S3	Plan Reading and Quantity Survey	2*	30	60
2021	Fall	CON 101 S1	Introduction to Construction Management	3	22	66
		CON 101 S6	Introduction to Construction Management	3	25	75
2021 [♣]	Spring	CON 101 S1	Introduction to Construction Management	3	36	108
2020 [♣]	Fall	CON 101 S1	Introduction to Construction Management	3	37	111
2019	Fall	CON 101 S1	Introduction to Construction Management	3	58	174
		CON 101 S2	Introduction to Construction Management	3	59	177
2019	Spring	CON 101 S1	Introduction to Construction Management	3	40	120
		CON 503	Research in Construction Management II	3	7	21
2018	Fall	CON 265 S1	Plan Reading and Quantity Survey	2*	43	83
		CON 265 S2	Plan Reading and Quantity Survey	2*	44	88
		CON 101 S4	Introduction to Construction Management	3	39	78
2018	Spring	CON 265 S1	Plan Reading and Quantity Survey	2*	27	54
		CON 265 S2	Plan Reading and Quantity Survey	2*	32	64
		CON 265 S3	Plan Reading and Quantity Survey	2*	30	60
2017	Fall	CON 265 S1	Plan Reading and Quantity Survey	2*	30	90
		CON 265 S2	Plan Reading and Quantity Survey	2*	30	90
		CON 265 S3	Plan Reading and Quantity Survey	2*	30	90
2017	Spring	CON 265 S1	Construction Estimating I	2*	44	88
		CON 265 S2	Construction Estimating I	2*	45	90
		CON 503	Research in Construction Management II	3 [♦]	13	39
2016	Fall	CON 265 S1	Construction Estimating I	2*	35	70
		CON 476	Sustainable Practice- Design and Construction	3	29	87
2016	Spring	CON 265 S1	Construction Estimating I	2*	37	74
		CON 265 S2	Construction Estimating I	2*	40	80
		CON 101	Introduction to Construction Management	3	68	204
2015	Fall	CON 265 S3	Construction Estimating I	2*	34	68
		CON 476	Sustainable Practice- Design and Construction	3 [#]	29	87
2015	Spring	CON 265 S2	Construction Estimating I	2*	39	78
		CON 576	Sustainable Technology in Built Environments	3	4	12
2014	Fall	CON 265 S1	Construction Estimating I	2*	40	80
		CON 265 S2	Construction Estimating I	2*	38	76
		CON 476	Sustainable Practice- Design and Construction	3	27	81
2014	Spring	CON 265 S1	Construction Estimating I	2*	26	52
		CON 265 S2	Construction Estimating I	2*	30	60
		CON 500	Models of Disciplined Inquiry	3	8	24
2013	Fall	CON 265 S1	Construction Estimating I	2*	27	54
		CON 265 S2	Construction Estimating I	2*	31	62
		CON 476	Sustainable Practice- Design and Construction (co-taught with Dr. Caroline Clevenger)	2 [^]	20	60
2013	Spring	CON 265 S1	Construction Estimating I	2*	24	48
		CON 500	Models of Disciplined Inquiry	3	11	33
2012	Fall	CON 265 S2	Construction Estimating I	2*	29	58
		CON 476	Sustainable Practice- Design and Construction (co-taught with Dr. Caroline Clevenger)	1 [^]	26	26
Total					1,620	3,996

Notes:

* While GTAs teach lab sections (typically 4 to 6 per semester), I am responsible for the coordination of lab content and assignments with the lecture. In addition, I have been responsible for training new Graduate Teaching Assistants to teach the lab material.

♦ This course was previously CON 500; CSU Graduate School approved to rename this course in 2016.

In 2015, I submitted an application to the CSU School of Global Environmental Sustainability to add this course to their endorsed course list for the *CSU Minor in Global Environmental Sustainability*.

^ I re-developed and co-taught this course with Dr. Caroline Clevenger in fall 2012 and fall 2013. I had 33% (1 cr. hr.) and 67% (2 cr. hrs.) teaching responsibility, respectively.

♣ I have received a 3-credit release for serving as the CM Graduate Coordinator.

Other Teaching Responsibilities (Don't count to my Teaching load)

While the following courses were not part of my assigned teaching load, they reflect my commitment to teaching and CSU students' education.

Year	Semester	Course No.	Course Title	Cr. Hrs.	Enrollment	SCH
2024	Spring	CON 384	Supervised College Teaching	1	2	2
		CON 495	Undergraduate Independent Study - CM	3	1	1
		SYSE 799A	Dissertation Research	1	1	1
2023	Fall	CON 384	Supervised College Teaching	1	4	1
		SYSE 799A	Dissertation Research	1	1	1
	Summer	SYSE 799A	Dissertation Research	1	1	1
	Spring	CON 384	Supervised College Teaching	2	1	2
		SYSE 799A	Dissertation Research	1	1	1
Winter	CON 450	Study Abroad Program in Costa Rica	2	14 ^a	28	
2022	Fall	CON 384	Supervised College Teaching	1	1	1
	Spring	CON 384	Supervised College Teaching	2	1	2
2021	Fall	CON 384	Supervised College Teaching	1	1	1
	Fall	CIVE 799L	Dissertation Research	3	1	3
2020	Fall	CON 495	Undergraduate Independent Study - CM	2	2	4
	Fall	CON 384	Supervised College Teaching	1	1	1
	Winter	CON 450	Study Abroad Program in Costa Rica -	2	11 ^a	22
2019	Spring	CON 384	Supervised College Teaching	1	1	1
		CON 492D	Seminar – Commercial Project Management	1	15	15
		CON 495	Undergraduate Independent Study - CM	2	2	4
	Winter	CON 450	Study Abroad Program in Costa Rica	2	18 ^{a,b}	36
2018	Fall	CON 384	Supervised College Teaching	1	1	1
		CON 384	Supervised College Teaching	2	1	2
2018	Spring	CON 384	Supervised College Teaching	1	2	2
		CON 495	Undergraduate Independent Study - CM	1	1	1
		CON 695	Graduate Independent Study - CM	3	1	3
2017	Fall	CON 695	Independent Study - CM	3	1	3
		CON 384	Supervised College Teaching	2	1	2
2017	Spring	CON 495	Undergraduate Independent Study- CM	1	1	1
		CON 384	Supervised College Teaching	1	1	1
2017	Winter Break	CON 450	Study Abroad Program in Costa Rica - Sustainable Buildings (co-taught with Dr. Olbina)	2	15 ^a	30
2016	Fall	CON 384	Supervised College Teaching	1	2	2
		CON 495	Undergraduate Independent Study- CM	1	2	2
2016	Spring	CON 384	Supervised College Teaching	1	1	1
2016	Winter Break	CON 450	Study Abroad Program in Costa Rica - Sustainable Buildings (co-taught with Dr. Olbina)	2	18 ^a	36
2015	Fall	CON 101 S2	Introduction to Construction Management	3 ^c	57	171
		CON 101 S3	Introduction to Construction Management	3 ^c	56	168
		CON 384	Supervised College Teaching	1	1	1
		CON 695	Graduate Independent Study	2	1	2
		CON 699	Thesis	6	1	6
2015	Summer	CON 695	Graduate Independent Study	1	1	1
2015	Spring	CON 384	Supervised College Teaching	1	1	1
		CON 699	Thesis	3	1	3
2015	Winter Break	CON/INTD 450	Study Abroad Program in Costa Rica - Sustainable Buildings (co-taught with Mr. Wilkes)	2	16 ^a	32
2014	Fall	CON 384	Supervised College Teaching	1	1	1
		CON 699	Thesis	3	1	3
2014	Spring	CON 384	Supervised College Teaching	1	1	1
		CON 699	Thesis	6	1	6
2014	Winter Break	CON/INTD 450	Study Abroad Program in Costa Rica - Sustainable Buildings (co-taught with Dr. Clevenger)	1	15 ^a	30
2013	Fall	CON 684	Supervised College Teaching	3	1	3
Total					176	644

Notes:

- ^a Through the years, the study abroad program enrollment includes CSU, EARTH University, and CATIE students. In 2023, 14 students, 12 from CSU, and two local students participated in the program. During 2014-2017, a total of 66 students (49 from CSU and 17 from EARTH University) enrolled in the course. During 2019-2020, a total of 29 students (23 from CSU and 6 from EARTH University) enrolled in the course. In 2023, the course created a new partnership with CATIE and we have 14 students (12 from CSU and 2 from CATIE). I have co-taught this course with Drs. Ozbek, Clevenger, Olbina, and Mr. Jeff Wilkes in the last five offerings. I had 33% (1 cr. hr.) teaching responsibility in 2014 and 67% (2 cr. hrs.) during the rest of the offerings in which I have been the lead faculty member of the program. This course is a testament to *interdisciplinary education and diversity* regarding gender and major and their cultural origin comprised of American, Latin American, African, and other descendants. The course has enrolled students from various majors, including Construction Management, Civil Engineering, Interior Design, Business Administration, Landscape Architecture, and Agriculture Science.
- ^b In 2019, I was responsible for applying to add this course to their endorsed course list for the *CSU Minor in Global Environmental Sustainability*.
- ^c I taught this course during the last half of the semester since the assigned instructor of record could not teach this class due to his approved sick leave.

Examples of Teaching Activities:

Enduring Educational Materials

I have created or co-created various teaching modules that have effectively enhanced pedagogical content knowledge, learning climate, assessment practices, and inclusivity. They have been **widely shared with the broader academic community through conferences and publications** (see list below), demonstrating their impact on improving teaching and learning in construction management and sustainability education.

- **Valdes-Vasquez, R.** & Ozbek, M. E. (2024). "The First Four Weeks Initiative: Preparing Students For Success In An Introductory Construction Management Course." Proceedings of the Latin American Structural Engineering and Construction Conference, LATAM SEC, March 4-7, Quito, Ecuador. [doi: 10.14455/ISEC.2024.11\(1\).EPE-01](https://doi.org/10.14455/ISEC.2024.11(1).EPE-01)
- **Valdes-Vasquez, R.**, Olbina, S., Clevenger, C., & Ozbek, M. E. (2024). "Video Tours of Sustainable Building Projects on Campus: A Practical Approach to Teaching Sustainability." Proceedings of the Latin American Structural Engineering and Construction Conference, LATAM SEC, March 4-7, Quito, Ecuador. [doi: 10.14455/ISEC.2024.11\(1\).SUS-05](https://doi.org/10.14455/ISEC.2024.11(1).SUS-05)
- Sanford, K. L., Paige, F., Parker, P. J., **Valdes-Vasquez, R.**, Canevari, P.***, Diacik, E.** & Larsen, T. ** (2022). "Re-contextualizing Civil Engineering Education: A Systematic Review of the Literature." *In Proc. of the American Society for Engineering Education 2022 Annual Conference – Excellence through DIVERSITY*, June 26-29, Minneapolis, MN. <https://peer.asee.org/41666>
- Wilson, C. M. D., Smith-Colin, J. A., Salman, B., & **Valdes-Vasquez, R.** (2021). Co-Creating a Teaching Module on the Impacts of COVID-19 on Various Transportation Systems and Stakeholders. *In 2021 ASEE Virtual Annual Conference Content Access*. <https://peer.asee.org/36800>
- **Valdes-Vasquez, R.**, Luxton*, I., & Ozbek, M. E. (2020). "Understanding the Learning Impacts of a Short-Term Study Abroad by Using a Mixed-Method Approach." In: *Proceedings of the 14th Annual International Technology, Education and Development Conference*, 6 pages (Electronic Proceedings with no page numbers), March 2-4, Valencia, Spain. DOI: [10.21125/inted.2020.0376](https://doi.org/10.21125/inted.2020.0376)
- Mehany, M., Fontana, A., Utter, K., & **Valdes-Vasquez, R.** (2019). "The Development of a Construction Management Summer Program for Young Females – A Case Study." *Proc. of 55th Annual ASC International Conference*, April 10-13, 2019, Denver, CO.

Impactful Classroom and Teaching Improvements

Inspired by my participation in the 2020 TILT Summer Short Courses – Online & Hybrid Teaching, I made several impactful revisions to enhance student engagement and deepen their understanding in my CON 101 (Intro to Construction Management). These revisions primarily address the *curriculum/curricular alignment, student motivation, classroom climate, and instructional strategies* domains of the TILT Teaching Effectiveness Framework (TEF). Course syllabi, assignments, and other teaching materials are not included but are available upon request.

Educational Leadership

As shown in my *Other Teaching Responsibilities* section above, I **Co-teach** and **lead** the Sustainable Buildings study abroad course in Costa Rica (CON 450) in partnership with EARTH University until 2029 and new partnership with CATIE since 2023. Several publications have come from this program (*indicates graduate student):

- Luxton, I.*, **Valdes-Vasquez, R.**, Ozbek, M. E., & Thornes, L. (2022). "High Impact Learning in a Short-Term Study Abroad Program." *Frontiers: The Interdisciplinary Journal of Study Abroad*, 34(1), 97-130. DOI: <https://doi.org/10.36366/frontiers.v34i1.541>

- **Valdes-Vasquez, R., Luxton*, I., and Ozbek, M. E. (2020).** “Understanding the Learning Impacts of a Short-Term Study Abroad by Using a Mixed-Method Approach.” In: *Proceedings of the 14th Annual International Technology, Education and Development Conference*, 6 pages (Electronic Proceedings with no page numbers), March 2-4, Valencia, Spain. DOI: [10.21125/inted.2020.0376](https://doi.org/10.21125/inted.2020.0376)
- Villacias Tapia, E.V., Luxton, I*, **Valdes-Vasquez, R., Ozbek, M. E., and Ayarza, C. (2020).** “Breaking Students’ Comfort Zone: Learning from Community Members, a Strategy within the AEC Education.” In: *Proceedings of the EURO MED SEC 03 Conference: Holistic Overview of Structural Design and Construction*, EPE.07.01-EPE 07.06, August 3-8, Limassol, Cyprus. DOI: [10.14455/isec.res.2020.7\(1\).epe-07](https://doi.org/10.14455/isec.res.2020.7(1).epe-07)

Most importantly, based on my leadership and engagement with this study abroad program, I have received the following awards:

- 2019, [Excellence in Education Abroad Curriculum Design](#), the Forum on Education Abroad, Kansas City, MO.
- 2019, Education Abroad Advisory Committee **Partner of the Year**, CSU Office of Inter. Programs, Fort Collins, CO.

In 2021 and 2022, I was part of a group of three faculty members, including Drs. Ashley Harvey and Meara Faw, who implemented virtual workshops related to **First Four Weeks (FFWs) initiative**, focusing on student outreach and how to use Canvas Analytics to increase student engagement and success.

- January 2021, one workshop, 25 GTAs and faculty participated from Human Development and Family Studies and Construction Management.
- August 2021, two workshops, 40 GTAs and faculty from CHHS participated
- January 2022, one workshop, 20 participants across different programs, including CHHS, College of Liberal Arts, and Early Performance Feedback (EPF) Instructors.

During the last 3 years and as a part of my IUSE NSF grant, I have co-created and co-organized the following national virtual CIT-E workshops:

- *Summer 2023, Teaching Future Engineers about Equitable Infrastructure:* On August 7 and 8, faculty members worked with colleagues to co-create learning materials related to equitable infrastructure for a course that they teach. A panel session, as well as presentation of case studies, helped attendees learn how to design a *publishable* project related to the development and implementation of the learning materials.
- *Summer 2022, Infrastructure Engineering as a Social and Community-Based Practice:* On August 9 and, faculty members learned about Science, Technology, and Society (STS) and how it relates to infrastructure education. They had the opportunity to work with colleagues to co-create learning materials related to this topic for a course that they teach.
- *Summer 2021, Talking about Diversity, Equity, and Inclusion (DEI) with Civil and Environmental Engineering (CEE) Students:* On August 10 and 11, faculty members were able to learn new skills to facilitate a difficult in-class conversation by learning best practices, participating in a demo class activity, co-creating a resource library of sample DEI in CEE applications and cases, and co-creating an in-class activity for one of your classes.

Educational Professional Development

I have participated in several professional development activities at CSU and through participation in national conferences. Below is a list of events (non exhaustive) of the events I have engaged with to enhance my teaching:

- (2024) ASEE Annual Conference, Portland, OR, June 23-26, 2024.
- (2024) IUSE NSF Summit: *IUSE=(DEIA+STEM) x Innovation*, Washington, DC, June 16-18, 2024.
- (2024) TILT Summer Conference - Supporting Today’s Students, Fort Collins, CO, May 15-16, 2024
- (2024), ASC Regions 6 & 7 Student Competition and Construction Management Conference, Sparks, NV, February 7-10,
- (2023) ASEE Annual Conference, Baltimore, MD, June 25-28, 2023.
- (2023) TILT Summer Conference - Explore and Embrace Equitable Assessment Practices, Fort Collins, CO, May 17-18, 2023
- (2023), ASC Regions 6 & 7 Student Competition and Construction Management Conference, February 8-11, Sparks, NV.
- (2022) GCIM Mentor Well Program, Fort Collins, CO, August 3-4, 2022.
- (2022) ASEE Annual Conference, Minneapolis, MN, June 26-29, 2022.
- (2022) IUSE NSF Summit: *Propelling Change- Moving from Strategy toward Effective & Equitable Undergraduates STEM Education*, Washington, DC, June 5-7, 2022.
- (2022) TILT Summer Conference “Student Success = Faculty Success”, Fort Collins, CO, May 18-19, 2022.
- (2022) TILT Professional Development Institute, Fort Collins, CO, January 10-12, 2022
- (2021) Fall Ram-up, virtual, August 10-12, 2021.

- (2020) TILT Summer Short Courses – Online & Hybrid Teaching, Fort Collins, CO, over summer 2020.
- (2020) First Four Weeks (FFW) Train-the-Trainer (Triple T) Workshop, Fort Collins, CO, November 11-12, 2020.
- (2020) Center for Infrastructure Transformation and Education (CIT-E) virtual workshops, UW-Platville, July 29 and August 2-3, 2020.
- (2020) CSU ELEVATE Student Supervisor Focus Certificate Program, virtual, August to October 2020.
- (2020) AGC WebEd - Navigating the Outbreak, virtual, March 2020.
- (2020), ASC Regions 6 & 7 Student Competition and CM Conference, Sparks, NV, February 5-8, 2020
- (2019) The Power of Feedback: Constructive and Positive, Fort Collins, CO, September 5, 2019.
- (2019) Colorado Learning and Teaching with Technology (COLTT), Boulder, CO, August 8-9, 2019.
- (2019) CSU Intergroup Relations Institute, Fort Collins, CO, May 21-23, 2019.
- (2019) CHHS Faculty Mentoring Workshop, Fort Collins, CO, April 22, 2019.
- (2019), ASC Regions 6 & 7 Student Competition and CM Conference, Sparks, NV, February 6-9, 2019

Mentoring/Advising

Please see specific details under the next section “Advising,” under the description of mentees and mentoring activities.

Peer Evaluations

Every year, I ask for peer teaching evaluations. They are available upon request.

Student Course Surveys

Every semester, CSU conducts course evaluations. They are available upon request.

Written Comments from Students course surveys

Every semester, CSU conducts course evaluations. They are available upon request.

Overall, students consistently has praised my exceptional teaching, dedication, and support. Their comments highlight my preparedness, organization, and clear communication of expectations. Despite acknowledging the challenging nature of some courses, students appreciated my ability to make complex material digestible, my availability for additional help, and my timely and detailed feedback. My inclusive and motivating teaching style fostered a positive and engaging learning environment, making students feel respected and supported regardless of their backgrounds. Many students noted how my courses and guidance significantly impacted their academic and professional pursuits in construction management. These comments repeatedly highlight the following positive characteristics of my courses:

- ✓ I am well-prepared, very organized, and knowledgeable about the courses I teach. My courses are educational, enjoyable, and challenging. I want my students to understand and apply the course material to their future courses and careers.
- ✓ I dynamically organize the class, targeting different learning styles by providing multiple resources for my students (slides, reading materials, videos, guest speakers, site tours, etc.)
- ✓ I foster an inclusive and supportive learning environment where all students feel valued and encouraged to participate. I am approachable and available for one-on-one support, ensuring students have the help they need to succeed.
- ✓ I incorporate hands-on activities and interactive projects to engage students and deepen their comprehension of the material. Also, I integrate real-world examples and case studies to bridge theory and practice, enhancing students’ practical understanding.
- ✓ I regularly update course content to reflect the latest industry trends and advancements, keeping the material relevant and up-to-date.
- ✓ I use a variety of assessment methods to fairly evaluate students’ understanding and progress, including quizzes, exams, projects, and presentations.
- ✓ I provide constructive feedback on assignments and assessments to help students improve and learn from their mistakes.
- ✓ I encourage collaboration and teamwork through group projects and discussions, helping students develop essential interpersonal skills.
- ✓ I promote critical thinking and problem-solving skills by presenting students with complex, real-world challenges to tackle.
- ✓ I emphasize the importance of sustainability and social responsibility in all aspects of the course, aligning with industry best practices and future trends.

Teaching Assignments in other Schools.

Glenn Department of Civil Engineering, Clemson University, SC

Primary Instructor

- Capstone Design Project – Construction Portion (Spring and Fall 2011; Spring 2012)
- Research Processes for Civil Engineering (Fall 2011)

Course Development

- Develop and present a sequence of classes, assignments and assessments related to Social Sustainability in construction projects in collaboration with Colorado State and Virginia Tech.

Teaching Assistant

- Sustainable Infrastructure Systems (Spring 2011)
- Sustainable Construction (Fall 2009; Fall 2010)

Civil Engineering Department, Technological University of Panama, Panama

Lecturer (January 2007 to April 2008)

- Developed and taught the following graduate-level courses:
 - Construction Safety
 - Project Management Applications
- Taught the following undergraduate engineering and construction courses:
 - Construction Methods and Estimating
 - Scheduling and Project Control
 - Construction Project Economic Evaluation
 - Dynamics
- Supported the Continuing Education Unit by teaching seminars on Construction Safety to working professionals.

Lecturer (March 2000 to December 2003)

- Taught the following undergraduate engineering and construction courses:
 - Construction Methods and Estimating
 - Scheduling and Project Control
 - Construction Materials
 - Structure I
 - Surveying Labs
 - Dynamics
 - Statics

ADVISING

Student Advising and Graduate Supervision

Undergraduate Students:

Note: Undergraduate students are advised by professional staff in the Construction Management Department at CSU. However, I have served as an advisor for thesis Honor Programs and independent study topics for CM students. In addition, I served as an advisor for undergraduate students in Panama. Please see more details under **“Other Activities/Accomplishments - Teaching/Advising.”**

CM undergraduate research advisees:

- Allannah DeLong (Independent Study, *Pilot Study – Integrated Model-Based Estimating*), Spring 2024
- Trevor Wahl (**Honors Thesis**, *Opportunities for Improving Water Certification on LBC Projects in Semi-Arid Climates: Colorado Case*), 2023-2024.
- Carter Cape (**Honors Thesis**, *Environmental assessment of robotic concrete laser screed*), 2023.
- Matt Klimm (Independent Study, *The Supply Chain of a TPO Commercial Roofing System during the COVID-19 Pandemic*), Fall 2020.
- Joe Oakman (Independent Study, *Implementation of Sustainable Roofing Strategies in the Front Range Region*), Fall 2020.
- Brad Harris (**Honors Thesis**, *Assessing Fire Resistant Roofing for Colorado Residential Homes*), Fall 2019.
- Weston Sobotka (Independent Study, *Bamboo Construction in the Tropical Regions*), Spring 2019.
- Rupal Vaidya (Independent Study, *Life Cycle Analysis of a Simple Wastewater Management System for LBC Building in Colorado*), Spring 2019.
- Nicholas Haller (Independent Study, *Piloting a Site Logistics Plan teaching module*), Spring 2018
- Stephen Wheeler (**Honors Thesis**, *The Benefits and Challenges of Urban Vertical Farming: Analysis of Altius Farms*), 2017-2018.
- Franklin Alvis (**Honors Thesis**, *Challenges of Greywater Design on College Campuses*), 2017-2018.
- Tyson Merkey (Independent Study, *Understanding the Implementation of Water Reuse Technologies for LBC Projects and its Applicability in the State of Colorado*), Spring 2017
- Jordan Koslosky (Independent Study, *LEED v4 NC - Materials and Resource Credits and their Effect on the Submittal Process*), Fall 2016

Graduate Students:

Note:

The Department of Construction Management primary offers a bachelor's degree to around 750 undergraduate students and a master's degree to about 10 graduate students. Each CM graduate student must complete a final research project of professional quality to demonstrate their capability in their area of interest and readiness for professional practice. The research project results are presented as either a *Thesis (Plan A)* or *Professional Research Paper (Plan B)*.

The Department of Construction Management does not have a doctoral program, but collaborates with the Department of Civil and Environmental Engineering and the School of Education to offer interdisciplinary Ph.D. programs with CM focus areas for students with diverse backgrounds and research interests, totaling around 8 doctoral students. Compared with other CM Departments at R1 institutions, our graduate program is relatively small, and we have ten tenure-track positions in this unit.

Additionally, due to my affiliate appointment and international connections, I have been able to advise students from the CSU's Department of Systems Engineering and Project Management at the Universidade Federal de Pernambuco, due to my special faculty appointment and international collaborations, respectively.

Current graduate advisees:

- Mitali Vaidyanath (CSU M.S. CM, Plan B, finishing in fall 2025)
- George Passos (Ph.D. Management Engineering, Universidade Federal de Pernambuco, Co-advisor, defending in fall 2024. Dissertation Topic: *Advancing Public Procurement: Integrating Social Sustainability Criteria into the Contractor Selection Process using Multi-Criteria Decision-Making/Aiding (MCDM/A) in Design-Build Procurement.*)
- Robert Jones (CSU Ph.D. System Engineering, started in spring 2024)

Current Graduate Committee memberships (excluding those chaired)

- 0 #Plan C
- 0 #Plan B
- 1 #MS/MA
- 0 #PhD

Graduate Committee Memberships (not including those above):

- 0 #Plan C
- 6 #Plan B (3 CM students, 3 Civil Eng. student)
- 10 #MS/MA (3 CM students, 1 Mechanical Eng. student, 1 Interior Architecture + Design student, 5 Civil Eng. students, one of them from NC State)
- 5 #PhD (1 Civil Eng. from CU-Boulder, 1 Civil Eng. from Polytechnic University of Valencia, 1 Education Science from CSU, 1 Civil Eng. from CSU, and 1 System Engineering from CSU)

Graduate Degrees Completed Under My Supervision:

- Frank Nguyen, defended in May 2024, Co-advisor, CSU Ph.D. System Engineering. Dissertation title: *"Quality Control of Front-End Planning for Electric Power Construction: A Collaborative Process-Based Approach using Systems Engineering."* Post-Ph.D. employment: CSU-Los Angeles adjunct faculty.
- Shannon Ellis, 2023, CM MS, Plan B.
- Alyx Silva, 2022, Co-advisor, M.S. Civil Engineering Escola Politécnic da Universidade de Pernambuco, Brazil, Plan A
- Becky Moriarty Davis, 2021, CM MS, Plan B
- Srijesh Pradhan, 2020, Co-advisor, CM MS, Plan A
- George Passos, 2020, Co-advisor, M.S. Civil Engineering Escola Politécnic da Universidade de Pernambuco, Brazil, Plan A
- Mani Manish, 2018, Co-advisor, CM MS, Plan B
- Pradnyesh Rokde, 2017, Co-advisor, CM MS, Plan B
- Swaetha Jebackumar, 2017, CM MS, Plan A
- Abdul Qadeer Sahil, 2016, Co-advisor, CM MS, Plan A
- Evan Hughes, 2015, CM MS, Plan A
- Mark Gillaspie, 2015, MS Co-advisor, CM MS, Plan B
- Thomas M. Hardy, 2014, CM MS, Plan B
- Anderson Lewis, 2014, CM MS, Plan A

Descriptions of Mentoring Activities

Individual meetings: I am proud to follow the tradition of having one-to-one meetings with every one of my students during the first two weeks of class to clarify expectations about the course and know their background better. This approach helps me to build rapport with my students.

Competition Team Coaching: The Associated Schools of Construction hold annual student competitions in multiple specialty topics. During the National Sustainable Building and LEED/LBC competition, each six-person team has 16 hours to solve the problem provided by Skanska, the industry sponsor. I have coached the CSU Sustainable Building team in the national competitions from 2013 to – present. In 2015, 2016, and 2018, the CSU’s LEED/Sustainability team *obtained 2nd place* in the national competition, receiving \$1,000 award each year. In 2017, the Sustainable Building and LBC team *won 1st place* receiving \$1,500. During the last few years, the team have placed in the top five. Skanska, an international construction company, sponsors this competition.

CM Club Advisor: I am the faculty adviser of the CSU USGBC Student club. It has been one of the most active clubs in the department. In 2014, the club was highlighted in the 2014 Princeton Review’s Guide to 332 Green Colleges. The club has also received the CM William Duff Architects Speakers series award in three instances: \$1,200, 2014; \$1,200, 2015; and \$1,000, 2016. The Seminar series is funded by the William Duff Architects of San Francisco, California. Mr. Duff received his Master of Science in Industrial Sciences from CSU in 1994. In 2014, the stipend was giving to the USGBC and DBIA Clubs to invite *Nancy Kralik from Fluor Corporation* to speak about “Design-Build for Healthy Sustainable Projects.” In 2015, the funds were given to the USGBC and AGC Clubs to invite *Eric Freed, the Vice* President of the International Living Future Institute. In 2016, the USGBC and MCAA received the same award to host *Mr. Tom Stone, President of MCAA*. All these events were organized to impact advancing construction education and leadership significantly.

Supervised College Teaching Mentoring for Undergraduate and Graduate Students: As shown above, under *Other Teaching Responsibilities*, I have mentored 22 students (1 graduate student and 21 undergraduate students) on *Supervised College Teaching*, which is a CM technical elective course. I have exposed these students to assess the course’s learning objectives and provide critical feedback to their peers. The majority of these students got the opportunity to help me create and enhance teaching modules and assignments to understand the learning process beyond grading assignments.

Honors Student Advising: Over the years, I have had the privilege of mentoring several honors students on their thesis projects, guiding them through various topics in sustainability and construction management. This mentorship has culminated in substantial academic achievements, including publications and conference presentations. More recently, three of these students—Trevor Wahl, Carter Cape, and Brad Harris—published conference papers as co-authors and presented their studies at the Associated Schools of Construction (ASC) Conference. Through these mentorship experiences, I have witnessed the development of my students into knowledgeable and capable professionals, contributing meaningful research to the field of construction management and sustainability. Their successes reflect the collaborative efforts and dedication to academic excellence that define our CSU honors program.

Independent Study Advising: I have worked as an independent study advisor for nine (9) CM undergraduates, three (3) master students, and one (1) Ph.D. student. These independent studies have been very productive, resulting in valuable outcomes including (a) a conference proceeding article co-authored by one of these students, (b) two case study reports that are used in my CON 476 class (as well as by companies managing LEED projects), (c) six posters that were presented in the Engineering Sustainability conference, the Symposium for Sustainable Infrastructure, and CURC, and (d) the development of a case study for the AGC Education and Research Foundation.

Finally, in several of my courses, such as CON 101, CON 265, and CON 503, I work to **build connections** between new students, the CM Department activities, and the construction industry members. To facilitate these connections, I have **added** the following course requirements: participation in a job site visits that are organized and supervised by myself (I try to provide multiple options and types of projects); I organize and strongly advise students to attend company presentations (these held at various times during the semester and are coordinated by the student clubs such as the USGBC that I advise); and I strongly encourage students to attend the CM career fair every semester.

OTHER ACTIVITIES/ACCOMPLISHMENTS – TEACHING/ADVISING

Visiting Faculty Scholar Sponsored

(March 2020) Visiting Scholar – The Polytechnic University of Valencia, Spain. During my short time in Valencia (2 weeks) due to the pandemic, I was able to mentor a doctoral student who was in the process of analyzing data related to rural construction projects in Colombia. We discussed research techniques that could be used in the study recently published in the Sustainability journal.

(Summer 2013 and 2014) This sponsored campus visit was provided for my one-week engagement at Clemson University to disseminate and exchange knowledge with other researchers and graduate students working on sustainable construction topics. I was also invited to participate in scientific meetings to provide a cross-cultural and national perspective.

Judge

- Faculty Judge for the CSU Graduate Student Showcase, Fort Collins, CO, 2015-present.
- Faculty Judge for the CSU Celebrate Undergraduate Research and Creativity (CURC), Fort Collins, CO, 2013-present.
- Graduate School Committee - Martin Luther King Jr. Scholarship Award, 2015-2017.
- Judge for SACNAS National Conference, Graduate students conference talk presentations and undergraduate research posters, Long Beach, CA, 2016.
- Judge for SACNAS National Conference, Undergraduate Research Posters, Seattle, WA, 2012.
- Judge for Annual Clemson Declamation Contest, Clemson, SC, 2009-2011.

Civil Engineering Undergraduate Degrees completed under my supervision

I served as the *primary advisor* for more than 10 theses and professional practices for undergraduate students in Panama from 2001 to 2003 and from 2006 to 2007. Professional practices are composed of a six-month internship experience and a final report, which provides details about student work and recommendations for improvement. These students worked in public institutions and private construction companies to gain professional experience and improve the internal process in these organizations. Following is a sample of the students whom I advised:

Student Name	Institution/Company	Timetable
Diomedes Cruz	Panama Canal Authority	08/2006 – 02/2007
Yanela Pimentel	ProVivienda Group	07/2006 – 01/2007
Yarikel Agrazal	NOVA Construction, S.A	05/2003 – 11/2003
Karla Pombo	Ripard Holding Corp.	04/2003 – 10/2003
Katia Torrero	Cemex – Panama	11/2001 – 05/2002
Jose Pardo	FIS (Social Investment Fund)	01/2002 – 08/2002
Dario Cadavid	Panamanian Children, Women, and Family Dept.	12/2001 – 06/2002
Antonio Guido	Panama Canal Authority	11/2001 – 05/2002
Julio Lara	Panama Canal Authority	09/2001 – 01/2003
Raul Rios	COCIGE, S.A.	04/2002 – 01/2003
Janina Camarena	Intaco Panamá, S.A.	10/2001 – 09/2002
Enrique Villalaz	Panama Canal Authority	09/2001 – 03/2002

Other activities

I was a member of the following groups for which I also dedicate time mentoring members:

- Engineering Sustainable Solutions (ESSo) Research Group, (Associate Advisor, 2010-2012).
- SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) - Clemson Chapter (Secretary, Fall 2010)
- Hispanic Student Association (HSA) at Clemson University (Co-president, Fall 2005).

CV SECTION 4: Evidence of Outreach/Service

My internal and external service accomplishments have been acknowledged by the CM Department, culminating in receiving the Department of Construction Management Faculty Service Award in spring 2024. A few examples of these accomplishments include:

- ***Leadership in the CM Graduate Program:*** In 2019, during a transitional period for the Department, I volunteered to become the graduate program coordinator. Under my leadership, I have significantly improved the graduate program, particularly during the pandemic, by fostering a strong sense of community through regular informal meetings with all graduate students. I also implemented a more inclusive admission process and introduced new criteria for graduate student selection. Additionally, I led the development of a new process for selecting GTAs, further enhancing our program's quality and inclusivity.
- ***Leadership in Journal Editorial Boards:*** I began serving as a Guest Associate Editor for the [*ASC International Journal of Construction Education and Research*](#) in 2021. My dedication and thorough reviews led to my appointment to the Editorial Board as an Associate Editor in 2022. I also served as a Guest Editor for a special collection on [*Advances in Sustainability in the Built Environment*](#) in the [*ASCE Journal of Construction Engineering and Management*](#) in 2022, and currently, I am serving as an Assistant Specialty Editor for its Sustainable Construction track. Finally, in 2023, I was invited to serve as Senior Editorial Board for the [*Journal of Green Building*](#). In these editorial roles, I have reviewed more than 100 manuscripts, providing constructive feedback to authors, contributing to the journals' academic rigor and reputation of these international journals.
- ***Broader Service to CSU and the Construction Community:*** Beyond these primary roles, I have consistently contributed to CSU and the wider construction community. My service includes participation in multiple committees at CSU and Fort Collins, such as:
 - o CSU President's Sustainability Commission
 - o CM Faculty search committees
 - o Institute of the Built Environment Advisory Board
 - o CSU Climate Initiative
 - o Los Consejos (Hispanic Serving Institution Advisory Group)
 - o Faculty Council Committee on Libraries
 - o Building Performance Standards Technical Committee with the City of Fort Collins

These internal and external service activities showcase my ongoing commitment to improve our academic community. They exhibit leadership, innovation, and alignment with my research and teaching, as well as CSU's institutional goals.

COMMITTEES

University Committee:

- Member, CSU President's Sustainability Commission, Spring 2021-present. (interdisciplinary)
- Member, Los Consejos, a Hispanic Serving CSU Advisory Group, Spring 2023-present. (interdisciplinary)
- Member, Ad hoc working group about a future climate initiative at CSU, Summer 2022-present. (interdisciplinary)
- Faculty Council Committee on Libraries (voted), Fall 2020-Spring 2023. (interdisciplinary)
- Member, Graduate Center for Diversity and Access (former known as Colorado Alliance for Graduate Education and the Professoriate - AGEP), 2013-2017. (interdisciplinary)
- Member, Recruitment & Retention of Minoritized Employees Working Group, Fall 2021-Spring 2022. (interdisciplinary)
- Member, SoGES curriculum committee, Fall 2018- Spring 2021. (interdisciplinary)
- Member Urban Lab, Spring 2013-2020. (interdisciplinary)
- Member, CSU Education Abroad Advisory Committee (EAAC), Fall 2017-Spring 2019. (interdisciplinary)
- Member, CSU Community of Practice: Best Practices in Education Abroad Program Development, 2018. (interdisciplinary)
- Graduate School Committee - Martin Luther King Jr. Scholarship Award, 2015-2017. (interdisciplinary)
- Member, Graduate Center for Diversity and Access (former known as Colorado Alliance for Graduate Education and the Professoriate - AGEP), 2013-2017. (interdisciplinary)

College Committee:

- Advisory Board Member, Institute for the Built Environment, January 2019-present. (interdisciplinary)
- Member, CHHS Graduate Coordinators Committee, 2019-2024. (interdisciplinary)
- Member, CHHS Dean Search Committee (Dean Lise Youngblade), 2018-2019. (interdisciplinary)
- Member, College of Health and Human Science (CHHS) Research Committee, 2015-2019. (interdisciplinary)

Department Committee:

- Chair of the CM Graduate Program Committee, Spring 2019-Summer 2024.
- Member (voted), Tenure and Promotion Committee, Fall 2018-present.
- Member of TTF search committee (Assistant Professor: Jamil Uddin), Fall 2023.
- Member, CM Recruitment and Retention Committee, 2012-2023.
- Member of TTF search committee (Assistant Professor: Ziyu Jin), Fall 2022.
- Inaugural Chair of Inclusion Climate Team (currently DEI Committee), Fall 2020-Spring 2021.
- Chair of Adjunct Faculty search committee (Instructor: Jason Greves), Fall 2020.
- Co-PI, Renovation of 107 Guggenheim Hall, supported the CM Department to put together a proposal for the University Facility Fee Advisory Board (UFFAB), \$113,495.
- Chair of NTTF search committee (Instructors: Nicole Duffala and Todd Fantz), Fall 2019.
- Co-Chair of the CM Graduate Program Committee, Fall 2018.
- Member, CM Graduate Program Committee, 2012-2018.
- Faculty Coach, Associated Schools of Construction: Student Competition Team: Sustainable Building and LEED/LBC, Fall 2013-present.
- Faculty Advisor, CSU Sustainable Construction student club (formerly USGBC Student Chapter), 2013-present.
- Co-chair, Mortenson Center for Virtual Design and Construction Innovation project, 2012-2013.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES**Membership in Professional Societies:**

- American Society of Civil Engineers (ASCE) Member # 963399, 2009-present
- American Society for Engineering Education (ASEE) Member # 82205, 2014-present
- Royal Institution of Chartered Surveyors (RICS) Member # 1213246, 2005-present

Review/editorial boards

- Associate Editor – International Journal of Construction Education and Research, Fall 2021-present.
- Assistant Specialty Editor – ASCE Journal of Construction Engineering and Management (JCEM), Summer 2023-present.
- Guest Editor – Special Collection on Sustainability – ASCE Journal of Construction Engineering and Management (JCEM), Summer 2021-present.
- Senior Editorial Board – J. of Green Building, fall 2023-present.
- Guest Associated Editor – International Journal of Construction Education and Research, Spring 2021.
- Co-Chair of the Committee on Professional Practice for the ASEE Civil Engineering Division, 2020-2021.

Membership in Professional Organizations

- Associated Schools of Construction Faculty Membership, Region 6
- Associated General Contractors (AGC) of America, Faculty Membership
- Sigma Lambda Chi, the International Construction Honor Society, 2013-present.
- Chi Epsilon, the National Civil Engineering Honor Society, 2011-present.
- Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) National Member, 2009-present.

Conference track chair/organizer/moderator

- Member of the Organizing Committee of the CIT-E virtual summer workshops, 2021-2023.
- ASEE Virtual Conf., technical session moderator: Session R106A (Industry & Practice Topics), July 29, 2021.
- Moderators, Panel “Envisioning the building of the future” as part of the 21st Century Energy Transition Symposium, May 5. 2021.

- Member of the Committee on Educational Policy, ASEE Civil Engineering Division, 2019 Annual Conference, June 16-19, Tampa, FL.
- Member of the Organizing Committee of the Engineering Sustainability 2019, April 7-9, 2019.
- ASC 55th Annual Int. Conf., technical session moderator: Session 30, April 12, 2019.
- CRC 2018, technical session moderator: Sustainable Design and Construction, April 4, 2018.
- ASC 54th Annual Int. Conf., technical session moderator: Session 13, April 19, 2018.
- Member of the Organizing Committee of the Engineering Sustainability 2017, April 9-11, 2017.
- Co-Organizer of the 5th Michael Horman Research Symposium, April 9, 2017.
- SACNAS, technical session moderator: Engineering Research Education, October 13, 2016.
- Track Chair, 2016 Construction Research Congress, San Juan, Puerto Rico, May 31- June 2.
- CRC 2016, technical session moderator: Architecture/Engineering/Construction Education/ Construction Procurement and Financing, June 2, 2016.
- Track Chair, 2016 Int. Conf. on Sustainable Design, Eng. and Const., Tempe, AZ, May 18-20, 2016.
- ASC 52nd Annual Int. Conf., technical session moderator: Session 22, April 15, 2016.
- ASEE, technical session moderator: BIM in Construction Education, June 15, 2015.
- Co-Organizer of the 4th Michael Horman Research Symposium, April 19, 2015.
- ASEE, technical session moderator: Construction Materials and Technologies, June 18, 2014.
- CRC 2014, technical session moderator: Sustainable Design and Construction, May 20, 2014.

Peer Review Service

Reviewed research proposals and manuscripts for acceptance in:

- *National Science Foundation research programs*, 2014-present
- *Associated Schools of Construction (ASC) Int. Conference Proceedings*, 2012-present
- *American Society for Engineering Education (ASEE) Annual Conference*, 2014-present
- *ASCE Construction Research Congress (CRC) Proceedings*, 2013-present
- *ASC International Journal of Construction Education and Research*, 2014-present
- *ASCE J. of Construction Engineering and Management*, 2012-present
- *ASCE J. of Civil Engineering Education (formerly called ASCE J. of Professional Practice in Engineering Education and Practice)*, 2011-present
- *Journal of Green Building*, 2020-present.
- *Sustainable Cities and Society*, 2013-present
- *J. of Safety Health and Environmental Research*, 2013-present
- *The Latin American Structural Eng. and Construction Conference, LATAM SEC*, 2023-2024
- *Inter. Conf. on Sustainable Design, Engineering, and Construction (ICSDEC)*, 2015-2016
- *CIB W099 Annual Conference*, 2015
- *SACNAS National Conference*, 2012-2015
- *International J. of Environmental, Cultural, Economic and Social Sustainability*, 2010