

CURRICULUM VITAE

Zofia K. Rybkowski, PhD

Presidential Impact Fellow

Endowed Harold L. Adams Interdisciplinary Professor
Professor, Department of Construction Science, College of Architecture
Fellow, Center for Health Systems and Design
Texas A&M University, College Station, Texas 77843-3137
zrybkowski@arch.tamu.edu; 979-845-4354 (c)

AREAS OF RESEARCH INTEREST

Innovations in Architecture/Construction Management: Lean-Integrated Project Delivery, Large-scale 3D-Printing for Architecture/Construction, Lean Simulations, Target Value Design, Life Cycle Cost Analysis, Environmentally Sustainable Architecture and Construction, Line-of-Balance Scheduling, Evidence-Based Design for Healthcare Facilities, Self-regulating Building Skins; Automation in Architecture/Construction.

EDUCATION

| | |
|-------------------------------------------------------|----------------------------------------------|
| PhD, Civil and Environmental Engineering, 2009 | University of California, Berkeley |
| Certificate in <i>Management of Technology</i> , 2009 | University of California, Berkeley |
| MS, Civil and Environmental Engineering, 2005 | University of California, Berkeley |
| MPhil, Civil Engineering, 2004 | Hong Kong University of Science & Technology |
| MArch, Architecture, 1991 | Harvard University Graduate School of Design |
| MS, Biology, 1987 | Brown University |
| BS, Biology, <i>Phi Beta Kappa</i> * 1985 | Stanford University |

**Phi Beta Kappa* is a national honor society for undergraduate scholarly achievement. Only the top 10% of the graduating class at Stanford University was elected to *Phi Beta Kappa*.

Dissertation and Theses:

Rybkowski, Z. K. (2009). "The Application of Root Cause Analysis and Target Value Design to Evidence-Based Design in the Capital Planning of Healthcare Facilities," PhD dissertation, Civil and Environmental Engineering, University of California, Berkeley. Committee: Dr. Iris Tommelein (chair); Dr. Glenn Ballard, and Dr. Sara Beckman.

Rybkowski, Z. K. (2004). "Toward Energy Sustainability in Hong Kong: A Life Cycle Cost Analysis Case Study on Low Thermal Energy Transfer Envelopes for a Mid-Rise Commercial Building," MPhil Thesis, Civil Engineering, Hong Kong University of Science and Technology, Hong Kong. Committee: Dr. Moe MS Cheung (chair), Dr. JS Kuang, Dr. GH Chen, and Dr. Irene Lo.

Rybkowski, Z. K. (1991). "School for biology teachers: a memory theater of modern consequence," MArch Thesis, Architecture, Harvard Graduate School of Design, Cambridge, MA. Thesis chair: Prof. Jorge Silvetti.

Rybkowski, Z. K. (1987). "Ultrastructural analysis of rat seminiferous epithelium and Sertoli cell microtubules following 2, 5-hexanedione exposure," MS Thesis, Biology, Brown University, Providence, RI. Thesis chair: Dr. Kim Boekelheide.

PROFESSIONAL EXPERIENCE

Texas A&M University

Department of Construction Science
College of Architecture
College Station, TX

Graduate Coordinator for MSCM Program

Professor (full), 2024-present

Associate Professor, 2016-2024 (*tenured in 2016*)
Assistant Professor, 2009-2016
Fellow, Center for Health Systems & Design
Faculty Affiliate, *Mays Innovation Research Center*
Lab Supervisor, *Advanced Infrastructure Materials and Manufacturing Lab (AIMM)* with 6 axis ABB robot; Center for Infrastructure Renewal (CIR), TAMU

AGC Education and Research Foundation

Director, Board of Directors, 2020-present

(only two academics are selected nation-wide to simultaneously serve as Directors on this national-level 20-member executive board)

Satterfield and Pontikes, Houston Texas

Faculty company site research,
June 1-July 9, 2010

Stanford, Brown, Harvard, HKUST and
University of California, Berkeley

Teaching & Research Assistant, 1984-2009

HOK Asia/Pacific International, Hong Kong;
The Oval Partnership, Hong Kong; Dennis
Lau & Ng Chun Man Architects and
Engineers, Hong Kong; Shimizu
Corporation, Tokyo, Japan

Architectural Designer, 1991-2004

University of Hong Kong, Hong Kong
Department of Architecture

Visiting Lecturer/Design Studio Instructor,
Fulbright Scholar, 1994-1995

Harvard GSD, Career Discovery Program
Harvard University, Cambridge, MA

Design Studio Instructor, Summer 1991

HONORS and AWARDS

- **Solar Decathlon Build Challenge, Director's Award**, Co-Lead with Profs. Greg Luhan (Lead), Filza Walters (Co-Lead), and the Texas A&M Solar Decathlon student team, *Solar Texas*, National Renewable Energy Laboratory, Golden, Colorado, April 20-23, 2023.
- **Presidential Impact Fellow**, awarded to one faculty member in each College at Texas A&M University who has demonstrated excellence in research), award includes a \$75,000 prize, bestowed by Provost Carol A. Fierke on behalf of President Michael K. Young on November 5, 2019.
- **J. Thomas Regan Interdisciplinary Faculty Prize** (awarded to a faculty member in the College of Architecture who has demonstrated a commitment to interdisciplinary teaching and/or research in the built and virtual environment disciplines), 2018.

- **1st Place Winner**, Blue Sky Competition, **Dornfield Manufacturing Vision Award**, North American Manufacturing Research Institution/Society of Manufacturing Engineers (NAMRI/SME), with Alaa Elwany, Zachary Grasley, Stephanie Paal, and Negar Kalantar, for presentation entitled: “3D printing for civil engineering construction,” June 18-22, 2018.
- **Harold L. Adams Interdisciplinary Professorship in Construction Science**, professorship award \$36,000, 2017-2023, 2023-2026 (renewed in 2023)
- **Research and Scholarly Activity Awards**, Department of Construction Science, TAMU; 2016, 2017, 2018, 2019, 2020; \$12,000 total.
- Awardee, **New Scholar Program**, Construction Industry Institute (CII), select NSP awardees invited to present at annual conference, by invitation, 2016.
- **Construction Management Association of America (CMAA) Scholarship** (Northern California Chapter; **top award recipient**), 2007.
- Departmental Fellowship (UC Berkeley, Department of Civil and Environmental Engineering), 2006-2007.
- Harry H. Hilp Fellowship (University of California, Berkeley), 2004.
- Departmental Fellowship (Hong Kong University of Science and Technology, Department of Civil Engineering), 2003-2004.
- **Fulbright Scholar** (Hong Kong), 1994-5
- **Class Marshall (singular honor bestowed by graduating classmates, Harvard GSD)**, 1991.
- **Construction Institute of Boston Excellence Award** (Harvard GSD recipient), 1991.
- **American Institute of Architects Scholarship Award**, 1990-1991.

RESEARCH GRANTS

Funded: Competitive External

- 2024** . Transformation of undergraduate education in construction science through serious simulation games, Co-PI with David Jeong (PI), Andre Thomas (Co-PI), and Bugrahan Yalvac (Co-Investigator), **National Science Foundation** Directorate for STEM Education (IUSE: EDU), **\$749,611**.
- 2024** . Robert L. Bowen Industry Residency Program 2024, **Lead**, \$30,000 (\$10,000 from AGCERF, \$10,000 from DPR, \$10,000 from COSC); Purpose: To observe on-site safety training on DPR sites and develop simulations as a means to improve on-site worker safety, May 13-Aug. 8, 2024 (except for June 28-July 14).
- 2023** . Development of Construction Case Studies—Topic: Implementing Target Value Design, Associated General Contractors of America Education and Research Foundation (AGCERF), **PI** for TAMU, \$4,000, with Florida Gulf Coast University Long Nguyen (grant PI; total grant: \$9,000).
- 2023** . Smart and Sustainable Construction in the Digital Era, *National Science Foundation REU Site*; Collaborator, with David Jeong (PI), Julie Hartell (Co-PI), and Jacqueline Stillisano (Co-Investigator), \$402,904.
- 2022** . **Solar Decathlon**, “Solar Texas,” National Renewable Energy Laboratory, *U.S. Department of Energy*, Co-Lead with Greg Luhan (Lead), \$50,000 to advance to final competition.

- 2019 . National Workshop on Architectural Faculty in Environmental Sustainability Research (WAFES), *National Science Foundation* (NSF), Workshop participant (by competitive proposal selection), Joon-Ho Choi, USC Architecture, May 28 and 29, 2019, Ryerson University, Toronto, Canada, \$1,000.
- 2017 . PDC Student Challenge and International Summit & Exhibition on Health Facility Planning, Design & Construction, *AIA/AAHF* (American Institute of Architects and Academy of Architecture for Health), Principal Investigator (with Boong Ryoo (co-PI)), March 10-15, 2017, \$8,000.
- 2015 . “Interaction of Smart Materials for Transparent, Self-Regulating Building Skins,” **National Science Foundation (NSF)**: Early Concept Grants for Exploratory Research (EAGER) # 1548243 CMMI (SAE): *Division of Civil, Mechanical, and Manufacturing Innovation (Structural and Architectural Engineering and Materials)*, **Principal Investigator**, with Ergun Akleman (co-PI), Tahir Cagin (co-PI), Terry Creasy (co-PI), and Negar Kalantar (co-PI), September 1, 2015-October 31, 2017, **\$239,596**.
- 2015 . “Development of smart, self-regulated building systems inspired by comparative biophysiology,” 2015 NSF Early-Career Investigators Workshop on Cyber-Physical Systems in Smart Cities, Workshop participant (by competitive proposal selection), April 13 - 17, 2015, Seattle, WA, \$1,500.
- 2013 . “The Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery,” AAHF (Academy of Architecture for Health Foundation); Co-PI with Upali Nanda (CADRE: Center for Advanced Design Research & Evaluation); January-December 2014; \$20,000.
- 2012 . Developing a Standard for High Performance Buildings in Qatar, **National Priority Research Program (NPRP No.: 5-1445-2-614)**, Co-Principal Investigator (with lead PI John Bryant, Co-PI Mardelle Shepley and consultants Alex Amato and Cynthia Skelhorn), January 2013-December 2014, **\$635,923**.
- 1993 . Hong Kong and Chinese Architecture, **Fulbright Grant**: Institute for International Education, fall 1994-fall 1995, while visiting lecturer at University of Hong Kong, \$16,000.

Funded: Non-competitive External

- 2024 . C.A. Doose and Company, Inc., DBA Flintrock Builders, Process Mapping Workshops to develop Standard Operating Procedures for five departments: Construction, Financing, Purchasing, Sales, and Land, January 23-July 31, 2025, \$62,000.
- 2020 . Target Value Design (TVD) on-line workshop, The Spear Group, Lead, May 15, 2020, \$2,087.
- 2017 . Pilot Workshop on Serious Games and Simulations: Transforming Culture to Enhance Building Project Delivery, BC Housing, Vancouver, British Columbia, Canada, Lead, April 18, 2017, \$1,311.

- 2016 . Building Information Modeling (BIM) and Initial Energy Analysis of a Sustainable 3-D Printed Residential Prototype, Coat of Many Colors Ministries, Inc., Co-Principal Investigator with lead PI, Manish Dixit, October 1, 2016 – December 31, 2017, \$5,000.
- 2015 . “An Introduction to Lean History and Principles,” Walt Disney Imagineering, Glendale, CA, Lead, August 27 & 28, 2015; October 26 & 27, 2015; and November 12 & 13, 2015, \$27,000.
- 2012 . “Lean Crash Course,” Balfour Beatty, Lead, with graduate student James P. Smith, June 29, July 13, July 27, August 3, August 10, August 16, 17, & 18, 2012, \$7,500.
- 2012 . “Introduction to Lean, IPD, & TVD: a 3-day workshop, Penrose/ St. Francis Health Services, Colorado Springs, CO, Lead, with graduate students James P. Smith, Aditi Kulkarni, and Manish Munankami, April 26, 27, & 28, 2012, \$5,000.
- 2006 . “The evidence-based design literature review and its potential implications for capital budgeting of healthcare facilities,” *Health Research and Education Trust*, Researcher, with lead PI, Glenn Ballard, fall 2006-fall 2007, \$10,000.

Funded: Competitive Internal

- 2020 . Virtual Participatory Simulation Games for Teaching and Learning Project Management Principles, President’s Excellence Fund (T3), Co-PI, with David Jeong (PI), and Bugrahan Yalvac (Co-PI), January 2021-December 2021, \$30,000.
- 2020 . “Development of virtual lean simulation games for the construction industry,” *Construction Industry Advisory Council (CIAC)*, TAMU, Co-PI, with David Jeong (PI), January 2021-December 2021, \$25,000.
- 2019 . “Laying the foundation for an international research collaborative with TAMU as a hub: Identifying the current state and linking key innovators of 3D-printed and robotic construction,” *Construction Industry Advisory Council (CIAC)*, TAMU, PI, with Manish Dixit (Co-PI), January 2020-December 2020 (effective), \$25,000.
- 2018 . “Identifying the opportunities and challenges associated with 3D-printed and robotic construction: Seeding the development of an international digital construction collaborative,” Department of Construction Science, through application to the Construction Industry Advisory Council (CIAC), TAMU, PI, with Manish Dixit (Co-PI), January 2019-December 2019 (effective), \$15,000.
- 2018 . “Biomimetic interlocking modules for rapid emergency shelter fabrication,” President’s Excellence Fund (T3), Co-PI, with Ho-Yeong Kang (PI), and Matthew Yarnold (Co-PI), January 2019-December 2019 (effective), \$30,000.
- 2018 . “Multifunctional sustainable materials for 3D-printing environmentally adaptive resilient buildings,” President’s Excellence Fund (X-Grant), **PI**, with Bjorn Birgisson (Co-PI), Sarbajit Banerjee (Co-PI), Manish Dixit (Co-PI), Negar Kalantar (Co-PI), and Paul Schwab (Co-PI), 24 months, **\$498,778**.

- 2012 . “Development of flipped course materials for COSC 175 (Construction Graphics Communication),” *2012 Faculty Institute: ‘Flipping your course’ by Instructional Technology Services*, TAMU, Workshop participant with funds applicable to research, November 5-9, 2012, \$2,000.
- 2012 . “Real projects: An interdisciplinary proposal for high impact learning through service to the community,” Initiative for High Impact Learning Experiences (TAMU College of Architecture), Co-Investigator/ Researcher, with Mark Clayton (PI), Geoffrey Booth (Co-PI), Jose Solis (Co-PI), Julian Kang, Ben Bigelow, Joshua Bienko, Ming Han Li, and Bruce Dvorak, Fall 2012-Spring 2013 (Total \$25,000; Award distributed as \$500 per participating research faculty).
- 2010 . “Development & delivery of Target Value Design and Integrated Project Delivery Learning Modules for Lean Construction Guidebook,” *Construction Industry Advisory Council (CIAC)*, TAMU, PI, January 2011-December 2011, \$25,000.

Funded: Non-Competitive Internal

- 2023 “Innovation Ideas Competition and Research Program (2CRP) for COSC Interns,” Construction Industry Advisory Council (TAMU CIAC), Co-PI with David Jeong (PI) and Zhenyu Zhang (Co-PI), 12 months, \$38,280.
- 2021 . “3D-printed zero energy prototype for hot-humid climates,” Mays Innovation Research Center, **PI**, 12 months, \$10,000.
- 2020 . “Zero energy prototype for hot-humid climates,” Mays Innovation Research Center, **PI**, 12 months, \$5,000.

Not Funded: Competitive External

- 2023 . Empowering the Next Generation: A Lean Six Sigma Course for Excellence in Semiconductor Manufacturing, Texas A&M Semiconductor Institute Research and Development Program, Facilities and Programs Enhancements in Preparation for Semiconductor R&D, **PI**, with Kunhee Choi (Co-PI), \$152,848.
- 2023 . Fostering ergonomic commitment among small/medium contractor management through serious simulation games, CPWR (Center for Construction Research and Training), Co-PI, with Zhenyu Zhang (PI) and David Jeong (Co-PI); \$999,694.
- 2023 . Enhancing state DOTs agility in project development and delivery, National Academy of Sciences—Transportation Research Board (NCHRP), **PI** for TAMU, \$66,961 with TAMU David Jeong (Co-PI), with California State University Fresno (sponsor: \$234,399.16 grant total)
- 2023 . Ultra High-Performance Concrete for Additive Construction (CERL-15): Geometry, Rheology, & In-Situ Resource Utilization, *U.S. Army Engineer Research and Development Center*, **PI**, with Bjorn Birgisson (Co-PI), Sarbajit Banerjee (Co-PI), Prabhakar Pagilla (Co-PI), Jeff Bullard (Co-Investigator), and K. R. Rajagopal (Co-Investigator), 3 years; \$1,387,677.

- 2022** . The 12th House Project: Making Home Ownership Affordable and Attainable, Co-PI with Julie Hartell (PI), USAID-IDCA-REDSO-WCA-OP; \$500,000.
- 2022** . Teaching lean using simulations in Minecraft (TeLUSIM), Collaborative proposal, PI, with David Jeong (Co-PI), and Frode Drevland (Co-PI), Frode Drevland (PI, Norwegian University of Science and Technology) and Farook Hamzeh (PI, University of Alberta); UTFORSK, \$100,000.
- 2022** . Collaborative Research: Transformation of Undergraduate Education in Construction Science Through Serious Simulation Games; Co-PI, with David Jeong (PI), *National Science Foundation*; \$539,989.
- 2022** . Integrated Processes, Methods, and Technologies to Improve Construction Cost and Schedule Outcomes of Nuclear Power Projects, Co-PI, with David Jeong (PI), *Department of Energy*, Washington, \$800,000.
- 2021** . “Developing Lean Innovation Methods and Tools for Transportation Project Management and Delivery (RNS),” *Texas Department of Transportation (TxDOT)*, Co-PI, with David Jeong (PI), 24 months, \$300,000.
- 2021** . NRT-FW-HTF: “Reimagining convergent research training through human integration for the future of construction automation,” *National Science Foundation (NSF)*, Co-PI, with Manish Dixit (PI), Gerianne Alexander (PI), Bjorn Birgisson (Co-PI), and Susan Pedersen (Co-PI), 60 months, \$2,999,986.
- 2021** . IUUSE: Collaborative Research: Transformation of Undergraduate Education in Construction Science Through Serious Simulation Games, *National Science Foundation*, Co-PI, with David Jeong (PI), Jinsil Seo (Co-PI), and Bugrahan Yalvac (Co-PI), \$539,844 (returned).
- 2020** . “Developing Lean Innovation Methods and Tools for Transportation Project Management and Delivery (RNS),” *Texas Department of Transportation (TxDOT)*, Co-PI, with David Jeong (PI), 24 months, \$250,000 (converted to one-year synthesis project; under consideration).
- 2020** . SCC-CIVIC-PG Track A. “Micropolitan mobility—A pilot study into cyber-physical-system-assisted transportation innovations to address needs of underserved populations in micropolitan areas,” *National Science Foundation (NSF)*, Co-Principal Investigator (with James Tate (PI), \$50,000, with Wei Li (Co-PI), Gregory Luhan (Co-PI), and Panganamala Kumar (Co-PI).
- 2020** . “Scalability of mass timber in micropolitan housing,” *HUD Cooperative Research in Housing Technologies*, Co-Principal Investigator (with James Tate (PI), Shannon Van Zandt (co-PI), Greg Luhan, (co-PI), and community partner, senior personnel, advisor, and external reviewer, Robert Shankle, John Cooper, Aaron Stottlemeyer, and Emmerentie Oliphant, 2 years, \$400,000.
- 2020** . “On-Line, collaborative, virtual simulation, to impart Lean-Integrated Project Delivery, with a focus on Target Value Delivery principles and tools to AECO stakeholders,” Charles Pankow Foundation, PI, with David Jeong (Co-PI), 2 years, \$300,000.

- 2020** . “AccelNet: Accelerating discovery in 3D-printed additive construction through a Convergent Network-to-Network (N2N) Model, National Science Foundation, PI, with Bjorn Birgisson (Co-PI), Manish Dixit (PI), Stjepan Mestrovic (Co-PI), and Zhijian Pei (Co-PI), 36 months, \$749,925.
- 2020** . “NRT-FW-HTF: Reimagining convergent research training through human integration for the future of construction automation,” *National Science Foundation*, Co-PI (with Manish Dixit (PI), Gerianne Alexander (Co-PI), Bjorn Birgisson (Co-PI), Susan Pedersen (Co-PI), 60 months, \$2,999,971.
- 2019** . “Reimagining urban landscapes: The future of work in construction through the convergence of automation and materials design,” *National Science Foundation-IRES Track I*, Senior Personnel (SP), Co-mentor with Manish Dixit (PI), and Bjorn Birgisson (SP); Sarbajit Banerjee (SP); and Paul Schwab (SP), 36 months, \$299,803.
- 2019** . “Multi-functional & sustainable materials for 3-D printing environmentally adaptive resilient buildings,” *W. M. Keck Foundation*, PI, with Bjorn Birgisson (co-PI), Sarbajit Banerjee (co-PI), Manish Dixit (co-PI), and Paul Schwab (co-PI), 36 months, \$998,000.
- 2019** . “Preparing workforce for the future of work at the human-technology frontier in infrastructure manufacturing,” *National Science Foundation NSF-NRT-FW-HTF*, Co-PI with Zachary Grasley (PI), Sarbajit Banerjee (co-PI), Debra Fowler (co-PI), and Zhijian Pei (co-PI), 60 months, \$3,000,000.
- 2018** . “Coordination network of research and education on additive manufacturing for civil infrastructure design and construction,” *National Science Foundation (RCN)*, Co-PI, with Zhijian Pei (PI), Negar Kalantar (Co-PI), Stephanie Paal (Co-PI), 60 months, \$495,393.
- 2017** . “Novel bio-inspired nanomaterials for self-regulating building skins, *National Science Foundation (CMMI - Structural and Architectural Engineering and Materials (SAEM))*, Principal Investigator with Hong Liang (co-PI), and Negar Kalantar (co-PI), 36 months, \$450,000.
- 2017** . “Save the World Academy: Addressing low female retention rates in STEM through a personalized coaching program,” *Engineering Information Foundation*, PI, with Amir Behzadan (co-PI), 12 months, \$21,000.
- 2017** . “The relationship between the built environment and the business case (RTS #5): Developing and testing a BIM-based tool to estimate impact of the built environment on the business case: A Proof of Concept,” *Construction Industry Institute (CII)*, Co-PI (with PI Robert Ries, UF; and co-PI Thomas Ferris, TAMU), February 2017-October 2017, \$120,000.
- 2016** . “A guidebook for implementing alternative technical concepts into project delivery methods,” *National Cooperative Highway Research Program (NCHRP) 08-112*; Transportation Research Board (TRB); Sub-recipient with PI Ali Nejat & Katharine Hayhoe (Texas Tech University), Stuart Anderson (Texas A&M), Amir Heassami & Dhazi Sun (Texas A&M Kingsville), Jennifer Shane (Iowa State University), and Robynne Parkinson (Thaxton Parkinson), 21 months, \$450,000 (total); \$50,000 (sub-recipient)

- 2016 .** “Comprehensive simulation for the integrated delivery of capital projects,” *National Science Foundation-iCorps*, PI with Danny Kahler (Entrepreneurial Lead) and Andrea Strzelec (Industry Mentor), 6 weeks, \$50,000.
- 2016 .** “Integrated project delivery for industrial projects (RTS#7),” *CII (Construction Industry Institute)*, Co-PI, with Pardis Pishdad-Bozorgi (PI), Georgia Institute of Technology, 2 years, Approx. \$250,000.
- 2016 .** “Shape control strategies by shape memory hybrid composites design,” Strategic Areas Interdisciplinary Research Proposal; Seed Funding Grant offered by *TEES (Texas Engineering Experiment Station)*, the Dwight Look College of Engineering and Texas A&M University Division of Research, Co-PI with Terry Creasy (PI), Efstratios Pistikopoulos (Co-PI), Darren Hartl (Co-PI), Theocharis Baxevanis (Co-PI), Ergun Akleman (Co-PI), and Nikiforos Maragos (Post-Doc Nominee), September 2016-September 2017, \$50,000.
- 2015 .** “Smart materials: A vertically integrated multidisciplinary graduate educational program,” *National Science Foundation Research Traineeship Program (NRT) Innovations in Graduate Education (IGE) Track*, DGE: Division of Graduate Education, Co-PI, with PI Ergun Akleman, Co-PI Tahir Cagin, Co-PI Thomas McKnight, and Co-PI Terry Creasy, 2015-2018, \$499,554.
- 2015 .** “Modeling, simulation and optimizing of project implementation by loosely connected organizations,” *National Science Foundation*, SES: Division of Social and Economic Sciences, Co-PI with Ergun Akleman (PI) and Takashi Yamaguchi (Co-PI), 2015-2018, \$499,953.
- 2015 .** “Kentucky/Texas/Pennsylvania-Focus on reading-Sustainability Research Network,” *National Science Foundation Sustainability Research Networks Competition (Focus: Urban Sustainability)*, Researcher with Gregory Luhan (PI), Mardelle Shepley (Co-PI), Wei Yan (Co-PI), and six Co-Investigators (inclusive), September 2014-September 2018, \$4,817,604.
- 2014 .** “Development of a financial framework for return on investment of Lean, Integrated Project Delivery, and Target Value Design,” *Academy of Architecture for Health Foundation*, PI (sole), January 2015-December 2015, \$20,000.
- 2014 .** “Integrating sustainable building principles and lean processes to achieve resilient environments and resilient design practice,” Prime Sponsor: *American Institute of Architects*, 2015 *La Trobe Prize*; Sponsor: *Cornell University*, PI (TAMU side), January 2015-December 2016, \$41,672 total; \$12,887 (TAMU side).
- 2014 .** “Use of virtual modeling and the implicit association test to improve veteran affairs healthcare facility design decisions,” *National Science Foundation (CAREER: Faculty Early Career Development Program)*, PI (sole), February 2015-January 2020, \$400,000.
- 2014 .** “Optimization of construction operations through a value resource mapping system - A multiple related complex system based on organizations' core activities,” *National Science*

Foundation, Engineering and Systems Design, Co-PI, with Jose Fernandez-Solis (PI) and Boong Ryoo (Co-PI), September 2014-August 2017, \$628,623.

- 2014 . Automating Construction Optimization through a Reliability Modification Rate - a Multiple Related Complex System Approach based on Game Theories,” National Science Foundation, Co-PI, with Jose Fernandez-Solis (PI) and Co-PI Boong Ryoo (Co-PI), May 2014-April 2017, \$503,536.

Not Funded: Competitive Internal

- 2023 . “Heightening construction site safety awareness among students preparing for careers as building owners, architects, engineers, and constructors: A case study,” *Panther Research & Innovation for Scholarly Excellence Program (PRISE)*, Co-PI with PI Sarhan Musa of Prairie View Texas A&M University, May 15, 2023-May 14, 2024, \$40,000.
- 2017 . “College of Architecture Interdisciplinary Charrette,” High Impact Learning Activity, TAMU, PI, with Harold Adams (Co-PI), Rodney Hill (Co-PI), and Carol LaFayette (Co-PI), 1 year, \$24,906.65.
- 2017 . “Developing and testing a BIM-based tool to estimate impact of the built environment on the business case: A proof of concept,” *SEC Travel Grant*, TAMU, PI, with Robert Ries, University of Florida (Co-PI), May 29-June 9, 2017, \$1700.
- 2015 . “Smart buildings: A vertically integrated multidisciplinary educational program,” 2015 *Tier One Program (TOP): Integration of Multidisciplinary Research and Creative Activities into the Learning Experience*, TAMU, Co-PI, with PI Ergun Akleman and co-PI Tahir Cagin, co-PI Thomas McKnight, and co-PI Terry Creasy, 3 years, \$270,000.
- 2013 . “Cultural exploration of stakeholder tendencies for alignment and mis-alignment during Integrated Project Delivery,” *CIAC (Construction Industry Advisory Council)*, TAMU, Principal Investigator (sole), January 2014-December 2014, \$25,000.
- 2012 . “Development of instructional games to cross-train and prepare future architects and constructors for Integrated Project Delivery,” *PESCA Grant (Program for the Advancement of Scholarly and Creative Activities)*, TAMU, Co-PI, with Michael O’Brien (Co-PI), January 2012-December 2012, \$17,500.

RESEARCH

Total number of citations: 1333

h-index: 22 . i10-index: 40

All counts are according to Google Scholar, as of January 15, 2025

Note:

Citations follow the ASCE format

Student authors are indicated by an asterisk*

PUBLICATIONS

Peer-reviewed Journal Articles, published, accepted, or submitted for publication

“A*” rated journal: “Virtually all papers they publish will be of a very high quality. These are journals where most of the work is important (it will really shape the field) and where researchers boast about getting accepted,” according to the *Australian Research Council* (ARC), a governmental authority sponsored by the Australian Government. PESA (2011). <http://www.pesa.org.au/html_new/quality.htm>, September 21, 2011.

* * *

Peer-reviewed Journal Articles, under preparation

Reed, K., **Rybkowski, Z.**, and Bardenhagen, E. (2024). “Investigation of the impact of a two-day design charrette on undergraduates’ interdisciplinary competence,” *under preparation*.

Peer-reviewed Journal Articles, published or accepted for publication

1. Devkar, G., and **Rybkowski, Z. K.** (2025). TVD Simulation Game: Tracing the journey and moving forward, *Lean Construction Journal*, www.leanconstructionjournal.org (accepted for publication).
2. Kim, S.* , Mainardi, P.* , Jeong, D. H., **Rybkowski, Z. K.**, and Seo, J. H. (2025). “Technology-driven Serious Games and Simulations for Construction Management Education,” *Journal of Construction Engineering and Management*, ASCE, 151(1), 20 pp, DOI: [10.1061/JCEMD4.COENG-14512](https://doi.org/10.1061/JCEMD4.COENG-14512).
3. Khalife, S.* , **Rybkowski, Z.**, and Hamzeh, F. (2024). “Advancing architecture and engineering education for project value delivery,” *Journal of Architectural Engineering*, 30(4), 13 pp., DOI: [10.1061/JAEIED.AEENG-1798](https://doi.org/10.1061/JAEIED.AEENG-1798).
4. Yadav, N.,* Kang, J. H, **Rybkowski, Z. K.**, Yarnold, M. T., and He, W. (2022). Stress-weighted centroidal Voronoi tessellation for structural design, *Finite Elements in Analysis and Design* (Elsevier), DOI: doi.org/10.1016/j.finel.2022.103905.
5. Bhatnagar, S.,* Jacob, G.,* Devkar, G., **Rybkowski, Z. K.**, Arefazar, Y.* , and Obulam, R.* (2022). “A systematic review of lean simulation games in the construction industry,” *Architectural Engineering and Design Management* (Taylor and Francis), Dec. 28, DOI: [10.1080/17452007.2022.2155604](https://doi.org/10.1080/17452007.2022.2155604).
6. Farabakhsh, M.* , **Rybkowski, Z. K.**, Zakira, U.* , Kalantar, N., Onifade, I. (2022). “Impact of robotic 3D printing parameters on interlayer bond strength, *Automation in Construction* (Elsevier), 142, October, 12 pp, DOI: [10.1016/j.autcon.2022.104478](https://doi.org/10.1016/j.autcon.2022.104478).
7. **Rybkowski, Z.**, Arroyo, P., and Parrish, K. (2022). “Assessment of current Target Value Design practices: Consistencies and Inconsistencies of Application,” *Construction Management and Economics* (Taylor and Francis), March 21, DOI: [10.1080/01446193.2022.2037146](https://doi.org/10.1080/01446193.2022.2037146).
8. Forbes, L. H., **Rybkowski, Z. K.**, and Tsao, C.Y. (2021). “The evolution of lean construction education at US-based companies,” *Lean Construction Journal* (Lean Construction Institute), 182-193, www.leanconstructionjournal.org; ISSN: 1555-1369.

9. Nassereddine, H., Seo, K. W., **Rybkowski, Z. K.**, Schranz, C., and Urban, H.* (2021). "Propositions for a resilient, post-COVID-19 future for the AEC industry," *Frontiers in Built Environment* (Frontiers) ISSN: 2297-3362; DOI: [10.3389/fbuil.2021.687021](https://doi.org/10.3389/fbuil.2021.687021).
 10. Bajpayee, A,* Farahbakhsh, M.,* Zakira, U.,* Pandey, A.,* Abu Ennab., L.,* **Rybkowski, Z.**, Dixit, M. K., Schwab, P. A., Kalantar, N., Birgisson, B., and Banerjee, S. (2020). "In Situ resource utilization and reconfiguration of soils into construction materials for the additive manufacturing of buildings," *Frontiers in Materials* (Springer), 7:52, March 10, 12 pp., ISSN: 2296-8016, DOI: [10.3389/fmats.2020.00052](https://doi.org/10.3389/fmats.2020.00052).
 11. Saseendran, A.,* Bigelow, B. F., **Rybkowski, Z.**, Jourdan, D. (2020). "Disputes in Construction: An Evaluation of Contractual Effects of ConsensusDOCS," *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Construction* (ASCE), 12(2), 04520008:1-5; ISSN: 1943-4162 print, ISSN: 1943-4170 online, DOI: [10.1061/\(ASCE\)LA.1943-4170.0000377](https://doi.org/10.1061/(ASCE)LA.1943-4170.0000377).
 12. Saseendran, A.*, Bigelow, B. F., **Rybkowski, Z. K.**, and Jourdan, D. (2018). "Construction Disputes in the United States and the United Kingdom: A Comparison." *The Professional Constructor* (Journal of the American Institute of Constructors), 43: 02 (fall), 39-46; ISSN 0146-7557.
 13. Kalantari, S.,* Shepley, M. M., **Rybkowski, Z. K.**, and Bryant, J. (2017). "Designing for operational efficiency: Facility managers' perspectives on how their knowledge can be better incorporated during design," *Architectural Engineering and Design Management* (Taylor and Francis), 13:6, 457-478; ISSN: 1745-2007 print, 1752-7589 online, DOI: [10.1080/17452007.2017.1348333](https://doi.org/10.1080/17452007.2017.1348333).
 14. Kalantari, S.*, Shepley, M. M., **Rybkowski, Z. K.**, and Bryant, J. A. (2017). "Collaboration between designers and facility managers: Comparing the United Kingdom, the United States, and the Middle East," *Facilities* (Emerald), 35(9/10), 557-572; ISSN: 0263-2772, DOI: [10.1108/F-08-2016-0081](https://doi.org/10.1108/F-08-2016-0081).
 15. Alves, T., Lichtig, W., and **Rybkowski, Z. K.** (2017). "Implementing Target Value Design: Tools and Techniques to Manage the Process," *Health Environments Research & Design* (HERD; Sage), 10(3), 18-29; ISSN: 1937-5867 print, 2167-5112 online; DOI: [10.1177/1937586717690865](https://doi.org/10.1177/1937586717690865).
- Note: HERD is one of the only currently existing peer-reviewed journals dedicated exclusively to evidence-based design of healthcare facilities
16. Sindhu, J.*, Choi, K., Lavy, S., **Rybkowski, Z. K.**, Bigelow, B. F., and Li, W. (2017). "Effects of Front-End Planning under Fast-Tracked Project Delivery Systems for Industrial Projects," *International Journal of Construction Education and Research* (Taylor and Francis), 14 February, 16 pp.; ISSN: 1557-8771 print, 1550-3984 online, DOI: [10.1080/15578771.2017.1280100](https://doi.org/10.1080/15578771.2017.1280100).
 17. **Rybkowski, Z. K.**, Shepley, M. M., Bryant, J. A., Skelhorn, C., Amato, A., and Kalantari, S.* (2017). "Facility management in Qatar: current state, perceptions and recommendations," *Facilities* (Emerald), 35 (5/6), 335-355; ISSN: 0263-2772, DOI: [10.1108/F-06-2016-0070](https://doi.org/10.1108/F-06-2016-0070).
 18. Nanda, U., **Rybkowski, Z. K.**, Pati, S., Nejati, A.* (2017). "A Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery: Stakeholder Perception," *Health Environments Research & Design Journal* (HERD; Sage), 10(3) 99-115; ISSN: 1937-5867 print, 2167-5112 online, DOI: [10.1177/1937586716670148](https://doi.org/10.1177/1937586716670148).
- Note: HERD is one of the only currently existing peer-reviewed journals dedicated exclusively to evidence-based design of healthcare facilities.

19. Fernández-Solis, J. L., **Rybkowski, Z. K.**, Xiao, C.*, Lü, X., and Chae, L. S. (2015). "General contractor's project of projects--a meta-project: Understanding the new paradigm and its implications through the lens of entropy," *Architectural Engineering and Design Management* (Taylor and Francis), 11(3), 213-242; ISSN: 1745-2007 print, 1752-7589 online, [DOI:10.1080/17452007.2014.892470](https://doi.org/10.1080/17452007.2014.892470).
20. Bilbo, D., Bigelow, B. F, **Rybkowski, Z. K.** and Kamranzadeh, A.,* (2014). "Effects of family-related factors on female project managers' salaries in the construction industry in the United States," *International Journal of Construction Education and Research* (Taylor and Francis), 00:1-13; ISSN: 1557-8771 print, 1550-3984 online, [DOI: 10.1080/15578771.2014.886641](https://doi.org/10.1080/15578771.2014.886641).
21. Shepley, M. M., **Rybkowski, Z. K.**, Aliber, J., and Lange, C. (2012). "Ambulatory infusion suite: Pre- and post-occupancy evaluation," *Building Research and Information* (Taylor and Francis), 40(6), 700-712; ISSN: 0961-3218 print, 1466-4321 online; [DOI: 10.1080/09613218.2012.709372](https://doi.org/10.1080/09613218.2012.709372), "A*" rated journal (ARC).
22. **Rybkowski, Z. K.**, Shepley, M. M., and Ballard, H. G. (2012). "Target Value Design: Applications to newborn intensive care units," *Health Environments Research and Design Journal* (HERD; Sage), 5(4), 5-22, ISSN: 1937-5867 print, 2167-5112 online, [DOI: 10.1177/193758671200500402](https://doi.org/10.1177/193758671200500402).

Note: HERD is one of the only currently existing peer-reviewed journals dedicated exclusively to evidence-based design of healthcare facilities.

23. Fernandez-Solis, J.L., and **Rybkowski, Z. K.** (2012). "A theory of waste and value," *International Journal of Construction Project Management* (Nova Science), Vol. 4, Issue 2; ref: MS12-02-A135, 89-105; [ISSN: 1944-1436](https://doi.org/10.1080/1944-1436).
24. **Rybkowski, Z. K.**, Zhou, X.,* Lavy, S. and Fernández-Solís, J. (2012). "Investigation into the nature of productivity gains observed during the Airplane Game lean simulation," *Lean Construction Journal* (Lean Construction Institute), 78-90; [ISSN: 1555-1369](https://doi.org/10.1080/1555-1369); 48% acceptance rate since journal founded in 2003.
25. Fernandez-Solis, J.L., Lavy, S., Porwal, V.,* Shaafat, A., **Rybkowski, Z. K.**, Son, K., and Lagoo, N.* (2012). "Survey of motivations, benefits and implementation challenges of Last Planner® System Users," *Journal of Construction Engineering and Management* (ASCE), 139(4), 354-360; ISSN: 0733-9364 print, 1943-7862 online; "A*" rated journal (ARC); [DOI:10.1061/\(ASCE\)CO.1943-7862.0000606](https://doi.org/10.1061/(ASCE)CO.1943-7862.0000606).

Peer-reviewed Conference Proceedings, under preparation

"A" rated conference: "The majority of papers in a Tier A journal will be of very high quality," according to the Australian Research Council (ARC), a governmental authority sponsored by the Australian Government. PESA (2011). http://www.pesa.org.au/html_new/quality.htm, September 21, 2011. **Only 21%** (414 of 1947 conferences listed) **are considered in this top category ("A" rated)**. "B" rated conference includes 27% or next 527 of 1947 conference listed. Note: As of 2014, the **IGLC conference has a 58% paper acceptance rate**.

1. Ramalingam, S., Ehsas, H., Bharadwaj, D., Vipalhumar, S. M., and **Rybkowski, Z. K.** (2025). Dissemination of Target Value Design principles through a bridge construction online simulation: overview and case study. In O. Seppänen, L. Koskela, & K. Murata (Eds.), *Proceedings of the 33rd Annual Conference of the International Group for Lean Construction*, 12 pp. (submitting in Jan 2025).

2. Torres, J., Kim, S., Joeng, D., and **Rybkowski, Z. K.** (2025). Developing and Testing Muri Puzzle Game. In O. Seppänen, L. Koskela, & K. Murata (Eds.), *Proceedings of the 33rd Annual Conference of the International Group for Lean Construction*, 12 pp. (submitting in Jan 2025).
3. Nawar, S. P., and **Rybkowski, Z. K.** (2025). Simulation for direct application of visual management on construction job sites, In O. Seppänen, L. Koskela, & K. Murata (Eds.), *Proceedings of the 33rd Annual Conference of the International Group for Lean Construction*, 12 pp. (submitting in Jan 2025).
4. Arroyo, P., **Rybkowski, Z. K.**, Tran, D., & Lieb, C. (2025). Case study: On complexity in design and IFOA Healthcare Project in California. In O. Seppänen, L. Koskela, & K. Murata (Eds.), *Proceedings of the 33rd Annual Conference of the International Group for Lean Construction*, 12 pp. (submitting in Jan 2025).

Peer-reviewed Conference Proceedings, published or accepted for publication

1. **Rybkowski, Zofia K.**, Farahbakhsh, M., and Kalantar, N. (2024). "Impact of geometry on performance in the built environment and its potential for 3D printing," In *Proceedings of the 2024 TRB Conference on Advancing Manufacturing and Construction in Transportation*, Irvine, CA, November 7-8, 5 pp.
2. Prabakaran, R., Devkar, G., **Rybkowski, Z. K.**, and Kannimuthu., M. (2024). "The Repair-Co Game: A roadmap to demonstrate the importance of problem-solving capabilities of Lean tools." In D. B. Costa, F. Drevland, & L. Florez-Perez (Eds.), *Proceedings of the 32nd Annual Conference of the International Group for Lean Construction*, Auckland, New Zealand, July 1-6, 1303-1313. [DOI.org/10.24928/2024/0211](https://doi.org/10.24928/2024/0211).
3. Chau, A., Linares Garcia, D., Nguyen, L., and **Rybkowski, Z. K.** (2024). "Development of an educational case study to explore target value design," *2024 ASEE Annual Conference & Exposition*, Portland, Oregon, June 22-26.
4. Ramanath, V.*, and **Rybkowski, Z. K.** (2023). "Exploration of educational backgrounds, personality traits, and gender on tendencies to collaborate among owners, architects, engineers, and contractors," *Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC31)*, Lille, France, June 26-July 2, 2023, 687-698, [DOI:10.24928/2023/0268](https://doi.org/10.24928/2023/0268) (Nominated for **best paper award** & selected for **plenary presentation**).
5. Kim, S.*, **Rybkowski, Z. K.** and Jeong, D. (2023). "Developing and testing computer-based and virtual reality target value design simulations," *Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC31)*, Lille, France, June 26-July 2, 2023, 629-638, [DOI: 10.24928/2023/0194](https://doi.org/10.24928/2023/0194) (Nominated for **best paper award**).
6. Arefazar, Y.*, **Rybkowski, Z. K.**, Jeong, D., Seo, J. H., and Maghool, S. A. H.* (2023). "Development and testing of a digital lean tool to sharpen motion and transportation waste recognition," *Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC31)*, Lille, France, June 26-July 2, 2023, 674-678, [DOI: 10.24928/2023/0253](https://doi.org/10.24928/2023/0253).
7. Kim, S.*, Jeong, H. D., **Rybkowski, Z.**, and Seo, J. H. (2022). "VR-driven gamification of project management principles and methods," *Proceedings of the 22nd International Conference on Construction Applications of Virtual Reality*, South Korea, Nov. 16-18, 525-532.

8. Arefazar, Y.* and **Rybkowski, Z. K.** (2022). "Developing & testing a value stream map simulation: Helping the construction industry learn to see," *Proceedings of the 30th Annual Conference of the International Group for Lean Construction (IGLC30)*, Edmonton, Canada, July 27-29, 2022, 342-353, DOI: [10.24928/2022/0135](https://doi.org/10.24928/2022/0135).
9. Golestanirad, P.*, **Rybkowski, Z. K.**, Dixit, M., and Luhan, G. A. (2022). "Building interdisciplinary teams through student design competitions: A case study," *Proceedings of the 30th Annual Conference of the International Group for Lean Construction (IGLC30)*, Edmonton, Canada, July 27-29, 2022, 1123- 1133, DOI: [10.24928/2022/0222](https://doi.org/10.24928/2022/0222).
10. Saiyad* M., **Rybkowski, Z. K.**, Suermann, P., Dixit, M., Luhan, G., Shanbari, H. (2022). "Hazard Recognition and Construction Safety Training Efficacy using Interactive Virtual Reality (VR)," *The 9th International Conference on Construction Engineering and Project Management*, Las Vegas, NV, June 20-23, 2022, 8 pp.
11. Kim, S.*, Mainardi, P.*, Jeong, H. D., **Rybkowski, Z.**, Seo, J. H. (2022). "3D online marshmallow simulation game for Target Value Design," *The 9th International Conference on Construction Engineering and Project Management*, Las Vegas, NV, USA, June 20-23, 2022, 8 pp.
12. **Rybkowski, Z. K.**, da C. L. Alves, T., and Liu, M. (2021). "The emergence and growth of the on-line serious games and participatory simulation group 'APLSO.'" *Proc. 29th Annual Conference of the International Group for Lean Construction (IGLC29)*, Lima, Peru, July 12-18, 269-278; DOI: [10.24928/2021/0135](https://doi.org/10.24928/2021/0135), "A" rated conference (ARC).
13. Obulam, R.*, and **Rybkowski, Z. K.** (2021). "Development and testing of the 5S puzzle game," *Proc. 29th Annual Conference of the International Group for Lean Construction (IGLC29)*, Lima, Peru, July 12-18, 309-319; DOI: [10.24928/2021/0152](https://doi.org/10.24928/2021/0152), "A" rated conference (ARC).
14. Jacob, G.*, Sharma, N.*, **Rybkowski, Z. K.**, and Devkar, G. (2021). "Target Value Design: development and testing of a virtual simulation," *Proc. 29th Annual Conference of the International Group for Lean Construction (IGLC29)*, Lima, Peru, July 12-18, 320-329, DOI: [10.24928/2021/0185](https://doi.org/10.24928/2021/0185), "A" rated conference (ARC).
15. Farahbakhsh, M.*, Borhani, A., Kalantar, N., and **Rybkowski, Z.** (2021). "PRINT-in-PRINT: A nested robotic fabrication strategy for 3D printing dissolvable formwork of a stackable column," *CAAD Futures 2021*, Los Angeles, CA, July 16-18, 2021, 13 pp., DOI: [10.1007/978-981-19-1280-1_20](https://doi.org/10.1007/978-981-19-1280-1_20) Acceptance rate for publication in conference proceedings 33%. Access at: <http://papers.cumincad.org/>.
16. Farahbakhsh, M.*, Kalantar, N., and **Rybkowski, Z.** (2020). "Impact of robotic 3D printing process parameters on bond strength: A systematic analysis using clay-based materials," *ACADIA 2020: Distributed Proximities*, October 24-30 (online), 9 pp.; "A" rated conference (ARC); Acceptance rate at ACADIA <30%. Access at: <http://papers.cumincad.org/>.
17. Liu, C.*, González, V. A., Liu, J., **Rybkowski, Z. K.**, Schöttle, A., Álvarez, C. M., and Pavez, I. (2020). "Accelerating the LPS Uptake using Virtual Reality and Serious Games: A Socio-technical Conceptual Framework." In: Tommelein, I.D. and Daniel, E. (eds.). *Proc. 28th Annual Conference of the International Group for Lean Construction (IGLC28)*, Berkeley, CA, July 6-12, 481-492; DOI: [10.24928/2020/0058](https://doi.org/10.24928/2020/0058), "A" rated conference (ARC).

18. Yaw, M. W.*, **Rybkowski, Z. K.**, and Jeong, H. D. (2020). "Reducing Handoffs between Sequential Trades: A Simulation." In: Tommelein, I.D. and Daniel, E. (eds.). *Proc. 28th Annual Conference of the International Group for Lean Construction (IGLC28)*, Berkeley, CA, July 6-12, 205-216; DOI: [10.24928/2020/0028](https://doi.org/10.24928/2020/0028), "A" rated conference (ARC).
19. Solhjou Khah, F.*, **Rybkowski, Z.**, Pentecost, A. R., Smith, J. P., and Muir, R. (2019). "Development and Testing of an Innovative Architectural Programming Simulation as a Precursor to Target Value Design," *27th Annual Conference of the International Group for Lean Construction (IGLC)*, González, V.A. (ed.), July 3-5, Dublin, Ireland, 515-525; "A" rated conference (ARC); DOI: [10.24928/2019/0221](https://doi.org/10.24928/2019/0221), "A" rated conference (ARC).
20. **Rybkowski, Z.**, Degenhart, S., Ryool, B. Y. (2019). "Assessment of an experimental five-day graduate student construction science 'bootcamp' at a research-intensive university: A case study," *55th Associated Schools of Construction Annual International Conference*, Denver, CO, April 11, 117-124, <<http://ascpro0.ascweb.org/archives/cd/2019/paper/CEGE283002019.pdf>>.
21. Mansoori, M.*, Kalantar, N., Creasy, T., and **Rybkowski, Z.** (2018). "Toward adaptive architectural skins: Designing temperature-responsive curvilinear surfaces," T. Fukuda, W. Huang, P. Janssen, K. Crolla, S. Alhadidi (eds.), Learning, Adapting and Prototyping, *Proceedings of the 23rd International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)* Tsinghua University, Beijing, China, May, Volume 2, 329-338, DOI: [10.52842/conf.caadria.2018.2.329](https://doi.org/10.52842/conf.caadria.2018.2.329)
22. Bhagat, N.*, **Rybkowski, Z.**, Kalantar, N., Dixit, M., Bryant, J., and Mansoori, M.* (2018). "Modulating natural ventilation to enhance resilience through modifying nozzle profiles: Exploring rapid prototyping through 3D-printing," T. Fukuda, W. Huang, P. Janssen, K. Crolla, S. Alhadidi (eds.), Learning, Adapting and Prototyping, *Proceedings of the 23rd International Conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA)*, Tsinghua University, Beijing, China, May, Volume 2, 185-194; DOI: [10.52842/conf.caadria.2018.2.185](https://doi.org/10.52842/conf.caadria.2018.2.185), "A" rated conference (ARC).
23. **Rybkowski, Z. K.**, Forbes, L. H., and Tsao, C. Y. (2018). "The evolution of lean construction education (Part 1 of 2): At US-based universities," In: *Proc. 26th Annual Conference of the International Group for Lean Construction (IGLC)*, González, V.A. (ed.), Chennai, India, 16-22 July, 1013–1023; ISSN: 2309-0979, DOI: [10.24928/2018/044](https://doi.org/10.24928/2018/044), "A" rated conference (ARC).
24. Forbes, L. H., **Rybkowski, Z. K.**, and Tsao, C. Y. (2018). "The evolution of lean construction education (Part 2 of 2): At US-based companies," In: *Proc. 26th Annual Conference of the International Group for Lean Construction (IGLC)*, González, V.A. (ed.), Chennai, India, 16-22 July, 1024–1034; ISSN: 2309-0979, DOI: [10.24928/2018/0463](https://doi.org/10.24928/2018/0463), "A" rated conference (ARC).
25. Thameem, M.*, **Rybkowski, Z. K.**, and Smith, J. P. (2017). "Delivery methods and social network analysis of unethical behavior in the construction industry," In: LC3 2017 Volume II – *Proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC)*, Walsh, K., Sacks, R., Brilakis, I. (eds.), July 4-12, Heraklion, Greece, 453-461; DOI: [10.24928/2017/0213](https://doi.org/10.24928/2017/0213), "A" rated conference (ARC).
26. Salazar, R.*, **Rybkowski, Z.**, and Ballard, G. (2017). "An Exploration of Compatibility of U.S. Army Culture and Lean Construction," In: LC3 2017 Volume II – *Proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC)*, Walsh, K., Sacks, R., Brilakis, I. (eds.), July 4-12, Heraklion, Greece, 413–420; DOI: [10.24928/2017/0199](https://doi.org/10.24928/2017/0199), "A" rated conference (ARC)

27. de Cresce El Debs, L., Shaurette, M., and **Rybkowski, Z. K.** (2017). "Selection of communication media by design and construction personnel for problem-solving," *Proceedings of the 53rd ASC (Associated Schools of Construction) International Conference*, April 5-8, 2017, Seattle, WA, 739-746.
28. **Rybkowski, Z. K.**, Munankami, M.,* Shepley, M. M., and Fernández-Solis, J. L. (2016). "Development and testing of a lean simulation to illustrate key principles of Target Value Design: A first run study." *Proceedings of the 24th annual conference of the International Group for Lean Construction*; July 20-22, 2016: Boston, MA, Sect. 4, 133–142; ISSN: 2309-0979, "A" rated conference (ARC)
29. Neeraj, A.* , **Rybkowski, Z.**, Fernandez-Solis, J.L., Hill, R., Tsao, C., Seed, B. and Heinemeier, D.(2016). "Framework Linking Lean Simulation Principles to their Application on Construction Projects." *Proceedings of the 24th annual conference for the International Group for Lean Construction*; July 20-22, 2016: Boston, MA, Sect. 9, 3–12; "A" rated conference (ARC)
30. Bhatt, Y,* **Rybkowski, Z. K.**, Kalantar, N., and Fernandez-Solis, J. L. (2016). "Trainathon Lean Simulation Game: Determining Perceptions of the Value of Training Among Construction Stakeholders." *Proceedings of the 24th annual conference of the International Group for Lean Construction*; July 20-22, 2016: Boston, MA, Sect.7, 53-62; "A" rated conference (ARC)
31. Bhaidani, N.,* **Rybkowski, Z.**, Smith, J., Choudhury, I., Hill, R. (2016). "Percent Planned Complete: Development and Testing of a Simulation to Increase Reliability in Scheduling." *Proceedings of the 24th annual conference of the International Group for Lean Construction*; July 20-22, 2016: Boston, MA, Sect.7, 33–42; "A" rated conference (ARC)
32. Kalyanaraman, N.,* **Rybkowski, Z. K.**, Fernández-Solís, J. L., Mann, G. J., Neeraj, A.* (2016). "Identification of Long-Term Learning Outcomes and Opportunities for Improvement from an Interdisciplinary Course between Architecture and Construction Science," *Proceedings of the 52nd ASC (Associated Schools of Construction) International Conference*, April 13-16, 2016, Provo, Utah, 8 pp.
33. Lee, S.,* Tabb, P., Rogers, J., **Rybkowski, Z.**, Van Zandt, S. (2016). "The impacts of cost Determinism in architectural foundation design education: An analysis of foundation design studio," *Urban Planning and Architecture Design for Sustainable Development (UPADSD)*, 14-16 October, 2015, in: *Procedia - Social and Behavioral Sciences* 216, 923 – 932; Elsevier, peer-reviewed open access.
34. **Rybkowski, Z. K.** and Kahler, D. (2014). "Collective kaizen and standardization: the development and testing of a new lean simulation," *Proceedings of the 22nd annual conference for the International Group for Lean Construction*; June 25-27, 2014: Oslo, Norway; ISSN: 2309-0979, "A" rated conference (ARC).
35. Smith, J. P.,* **Rybkowski, Z. K.**, Bergman, M., Shepley, M., and Smith J. S. (2014). "Trust-builder: A first-run study on active trust-building," *Proceedings of the 22nd annual conference for the International Group for Lean Construction*; June 25-27, 2014: Oslo, Norway; "A" rated conference (ARC).
36. **Rybkowski, Z. K.**, Abdelhamid, T., and Forbes, L. (2013). "On the back of a cocktail napkin: An exploration of graphic definitions of lean construction," *Proceedings of the 21st annual conference for the International Group for Lean Construction*; July 31-August 2, 2013: Fortaleza, Brazil, 83-92; "A" rated conference (ARC).
37. Smith, J. P.* and **Rybkowski, Z. K.** (2013). "The Maroon and White Game: A simulation of trust and long-term gains and losses," *Proceedings of the 21st annual conference for the International Group for Lean Construction*; July 31-August 2, 2013: Fortaleza, Brazil, 987-996; "A" rated conference (ARC)

38. Tsao, C., Azambuja, M., Hamzeh, F., Menches, C. and **Rybkowski, Z. K.** (2013). "Teaching lean construction: perspectives on theory and practice," *Proceedings of the 21st annual conference for the International Group for Lean Construction*; July 31-August 2, 2013: Fortaleza, Brazil, 977-986; "A" rated conference (ARC)
39. Kulkarni, A.,* **Rybkowski, Z. K.**, and Smith, J.* (2012). "Cost comparison of collaborative and IPD-like project delivery methods versus non-collaborative project delivery methods," *Proceedings of the 20th Annual Conference for the International Group for Lean Construction*; July 17-22, 2012: San Diego, CA, U.S.A., 781-790; "A" rated conference (ARC)
40. **Rybkowski, Z. K.**, Munankami, M.,* Smith, J.,* and Kulkarni, A.* (2012). "Survey instrument to facilitate continuous improvement of lean teaching materials: a first-run study," *Proceedings of the 20th annual conference for the International Group for Lean Construction*; July 17-22, 2012: San Diego, CA, U.S.A., 641-650; "A" rated conference (ARC)
41. Smith, J.* and **Rybkowski, Z.** (2012). "Literature review on trust and current construction industry trends," *Proceedings of the 20th annual conference for the International Group for Lean Construction*; July 17-22, 2012: San Diego, CA; "A" rated conference (ARC)
42. **Rybkowski, Z. K.**, Munankami, M.,* Gottipati, U.,* Lavy, S., and Fernández-Solis, J. (2011). "Impact of cost constraints on aesthetic ranking following Target Value Design exercises," *Proceedings of the 19th Annual Conference of the International Group for Lean Construction*, Lima, Peru, July 13-15, 448-457, "A" rated conference (ARC)
43. **Rybkowski, Z. K.** (2010). "Last Planner and its role as conceptual kanban," *Proceedings of the 18th Annual Conference of the International Group for Lean Construction*, Haifa, Israel, July 14-16, 63-72, "A" rated conference (ARC)
44. Porwal, V.,* Fernández-Solis, J. L., Lavy, S. and **Rybkowski, Z. K.** (2010). "Last Planner System—Implementation challenges," *Proceedings of the 18th Annual Conference of the International Group for Lean Construction*, Haifa, Israel, July 14-16, 9 pp, "A" rated conference (ARC)
45. **Rybkowski, Z. K.**, Wong, J.-M.,* Ballard, G. and Tommelein, I. D. (2008). "Using controlled experiments to calibrate computer models: the Airplane Game as a lean simulation exercise." *Proceedings of the 16th Annual Conference of the International Group for Lean Construction*, Manchester, UK, July 16-18, 309-319, "A" rated conference (ARC)
46. Ballard, G. and **Rybkowski, Z. K.** (2009). "Overcoming the hurdle of first cost: a case study in Target Value Design." *The 2009 Construction Research Congress (Construction Institute of ASCE)*, Seattle, WA, April 5-7, 1038-1047, ASCE Conference, "A" rated conference (ARC)
47. **Rybkowski, Z. K.** and Ballard, G. (2008). "Using the 'Five Whys' as a decision-making framework for evidence-based design," *Proceedings of the 16th Annual Conference of the International Group for Lean Construction*, Manchester, UK, July 16-18, 12 pp, "A" rated conference (ARC)
48. **Rybkowski, Z.** (2000). "Foundation of Stone: A Case for the Feynman Flip"—research article addressing the merits of a split semester and skill-based system in architectural education. *Proceedings of the ACSA 2000 International Conference*, Hong Kong, June 10-14, 10 pp.; "B" rated conference (ARC)

Invited Articles (Non-Peer-reviewed), published

1. **Rybkowski, Z. K.** (2020). "The potential of large-scale 3D-printing to usher in a paradigm shift toward environmental sustainability," *Proceedings: 2020 International Fall Conference of KIEAE (Korea Institute of Ecological Architecture and Environment)*, December 3-4, p. 9-14.
2. **Rybkowski, Z. K.** (2017). Guest Editorial: "Applying lean methods to healthcare design," *Health Environments Research & Design (HERD)*, *Health Environments Research & Design Journal (HERD)*, 10(3) 12-17.
3. **Rybkowski, Z. K.** (2012). "Methods of overcoming the capital cost hurdle of Evidence-Based Design," *Chinese Hospital Architecture & Equipment*, 10, 48.
4. Hamilton, D. K., and **Rybkowski, Z. K.** (2011). "Building evidence: using objective tools in construction project management," *Health Facilities Management Magazine*, November, 29-33.
5. **Rybkowski, Z. K.** (2009). "Letter to the Editor," *Health Environments Research & Design (HERD)*, February.
6. **Rybkowski, Z. K.** and Ballard, G. (2009). "Application of Target Value Design to a Case Study Project." *ASC-Texto Conference*, Dallas, TX, October 1-2, 4 pp.
7. **Rybkowski, Z. K.** and Cheung, Moe M. S. (2007). "Hong Kong, the Pearl River Delta, and Resource Sustainability by 2030: An Opportunity for Technological Leadership," *6th International Conference on Environmental Informatics*, Bangkok, Thailand, November 21-23, 6 pp.
8. **Rybkowski, Z.** and Seel, J. (1997). "Hong Kong," *Architectural Record*, July, 185(7), 86.
9. **Rybkowski, Z.** and Seel, J. (1996). "The Chinese are Coming! The Chinese are Coming! Will it Make Any Difference?" *Architectural Record*, July, 184 (7), PR23.
10. **Rybkowski, Z.** and Seel, J. (1996). "Political Stability and Economic Reform Provide Platform for Major Developments," *Architectural Record*, July, 184 (7), PR10.
11. **Rybkowski, Z.** (1995). "The Highs and Lows of Building in Asia," *GSD News (Harvard Graduate School of Design)*, Fall.

Research Reports

12. Nanda, U., Pati, S., **Rybkowski, Z. K.**, Ai, D., * Nejadi, A., * Kalyanaraman, N.* (2014). *Value Analysis of Lean Processes in Design and Integrated Project Delivery*, Academy of Architecture for Health Foundation (funder): CADRE & Texas A&M
13. Ballard, G., and **Rybkowski, Z. K.** (2007). "The evidence-based design literature review and its potential implications for capital budgeting of healthcare facilities," *Health Research and Education Trust*, August 9, 35 pp.

Proceedings Editor

14. **Rykowski, Z. K.**, Liu, M. and Sarhan, S. (eds.). (2023). *Proceedings of the 31st Annual Conference of the International Group for Lean Construction (IGLC31)*, June 26-July 2, 2023, Lille, France, 1756 pp. ISBN: 2309-0989 (printed); 2789-0015 (electronic).

Book, contributing co-author

15. Seed, W. R. ed. (2015). *Transforming Design and Construction: A Framework for Change*, Lean Construction Institute, Arlington, VA. List of contributing authors by alphabetical order: Beikmann, B., Bell, B., Bettler, R., Christian, D., Emdanat, S., Hill, C., Hill, K., Kelley, J., Lee, D., Loeb, J., Macomber, H., Nickerson, R., Brent, N., Reynolds, L., **Rykowski, Z. K.**, Seed, W., and Tsao, C.
16. EDAC. (2009). *Integrating Evidence-Based Design: Practicing the Healthcare Design* (Process Guide 3 in the series of 3), EDAC (Evidence-Based Design Accreditation and Certification Program), Paris Printing, Point Richmond, CA. List of contributing author: Kent, J., Richter, L., Keller, A, Watkins, N., Bosch, S., Rasche, J., Herbert, C., Allums, H., Malone, E., **Rykowski, Z.**, McLaughlin, T., Gephart, V., Moler, J., Stroupe, J., Doyle, K., Nanda, U., and Taege, K.

Book Chapters

17. **Rykowski, Z. K.** and Forbes, L. (approved for publication 2025). Volume II, Chapter 3: Lean Construction,” in *Handbook of Construction Management: Scope, Schedule, and Cost Control*, 2nd Edition, edited by A. Razzak Rumane, CRC Press Taylor & Francis Group, Florida.
18. Mansoori M., **Rykowski Z.**, Kalantar N., Creasy T. (2023). “Material Driven Adaptive Design Model for Environmentally-Responsive Envelopes,” In *Advanced Materials in Smart Building Skins for Sustainability: Nano to Macroscale*, Wang, J., Shi, D., and Song, Y. (ed.), Springer; 1st ed, to release on November 15, 2022.
19. **Rykowski, Z. K.**, Forbes, L. H., and Tsao, C. Y. (2020). “Chapter 19: The evolution of lean construction education at US-based universities,” *Lean Construction: 25 years of development*, edited by Patricia Tzortzopoulos, Mike Kagioglou, and Lauri Koskela, Routledge, New York, 387-407.
20. Mansoori M.,* Kalantar K., Creasy T., **Rykowski, Z.** (2019) “Adaptive Wooden Architecture. Designing A Wood Composite with Shape-Memory Behavior,” In: Bianconi F, Filippucci M (eds.), *Digital Wood Design*, Springer, New York., p. 703-717.
21. **Rykowski, Z. K.** and Forbes, L. (2016). “Chapter 8: Lean Construction,” in *Handbook of Construction Management: Scope, Schedule, and Cost Control*, 1st edition, edited by A. Razzak Rumane, CRC Press Taylor & Francis Group, Florida.

Member of Journal Editorial Boards, Guest Editor of Special Issues, and Conference Committees

1. **Scientific Committee Conference Chair**, with Co-Chair Randy Iwasaki, *TRB Conference on Advancing Additive Manufacturing and Construction in Transportation*, Irvine, CA, November 7-8, 2024. Sponsored by the National Academies of Sciences, Engineering, and Medicine and the Transportation Research Board.
2. **Scientific Committee Conference Chair**, with Co-Chairs Min Liu and Saad Sarhan, *31st Annual Conference of the International Group for Lean Construction (IGLC31)*, Lille, France, June 26-July 2, 2023.

3. Area Track Chair Editor (“Learning and Teaching Lean”) of the Technical Advisory Board: *Proceedings of the 30th Annual Conference of the International Group for Lean Construction (IGLC)*, Alberta, Canada July 27-29, 2022.
4. Area Track Chair Editor (“Learning and Teaching Lean”) of the Technical Advisory Board: *Proceedings of the 29th Annual Conference of the International Group for Lean Construction (IGLC)*, Lima, Peru, July 12-18, 2021.
5. Area Track Chair Editor (“Learning and Teaching Lean”) of the Technical Advisory Board: *Proceedings of the 28th Annual Conference of the International Group for Lean Construction (IGLC)*, Berkeley, CA, USA, July 6-12, 2020.
6. Advisory Board: *Lean Construction Journal*, since May 3, 2020.
(<https://www.leanconstruction.org/learning/publications/lean-construction-journal/editorial-board/>)
7. Guest Editor, Special issue on Lean Construction-Integrated Project Delivery, *Health Environments Research & Design (HERD)*, 2017 (issue TBA; 2017).
8. Area Track Chair Editor (“People, Culture, and Change”) of the Technical Advisory Board: *Proceedings of the 25th Annual Conference of the International Group for Lean Construction (IGLC)*, part of 2017 *Lean & Computing in Construction Congress (LC3)*: three (3) co-located conferences: CIB W78, CONVR, and IGLC), Heraklion, Crete, Greece, July 4-12, 2017.
9. Director of International Development, *Korea Institute of Ecological Architecture and Environment*, January 1, 2019-December 31, 2020.
10. Editorial board member, *International Journal of the Korea Institute of Ecological Architecture and Environment (KIEAE Journal)*, appointment by invitation; (launched in 2001, the international journal is published bimonthly, and has published more than 60 issues. All manuscripts are strictly peer-reviewed); January 1, 2014-present.

Reviewer of peer-reviewed journals

1. *Architectural Engineering and Design Management*, 2022, 2023
2. *Buildings*, 2023
3. *Building Research and Innovation*, 2022
4. *Engineering, Construction, and Architectural Management*, 2016
5. *Canadian Journal of Civil Engineering*, 2018
6. *Construction Management and Economics*, 2014, 2015, 2019
7. *Construction Robotics*, 2024
8. *Dyna, Ingeniería e Industria*, 2014
9. *Facilities*, 2013, 2012, 2019
10. *Health Environments Research & Design (HERD)*, 2009, 2013, 2014, 2021, 2022, 2023, 2024
11. *Intelligent Buildings International*, 2012
12. *International Journal of Construction Education and Research*, 2013
13. *International Journal of Construction Management*, 2012, 2020
14. *Journal of Architectural Education*, 2008
15. *Journal of Construction Engineering and Management*, 2011, 2016, 2017, 2018, 2019, 2020
16. *Journal of Interior Design*, 2016

17. *Journal of Management in Engineering*, 2010, 2016
18. *Lean Construction Journal*, 2010, 2011, 2012, 2017, 2021, 2022, 2024
19. *Production Planning & Control*, 2018
20. *Sustainability*, 2019, 2020, 2022

Reviewer of peer-reviewed conference proceedings

21. *Associated Schools of Construction (ASC)*, 2019
22. *International Conference on Construction Engineering and Project Management*, Las Vegas, NV, 2022
23. *The Construction Research Congress* (Construction Institute of the American Society of Civil Engineers): 2009, 2014
24. *Conference of the International Group for Lean Construction*: 2007, 2008, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2024.
25. *Association of Collegiate Schools of Architecture*, Hong Kong, 2000
26. *TRB Conference on Advancing Additive Manufacturing and Construction in Transportation*, 2024

Reviewer of peer-reviewed grant proposals

27. Mitacs, Accelerate Research Proposal, Canada, 2023
28. **National Science Foundation**, 2015, 2017.
29. *FEA Research Committee, University Research Board, American University of Beirut*, 2012.
30. *Research Grants Council of Hong Kong*, 2012, 2013, 2014, 2015, 2016, 2018, 2019, 2020.
31. Reviewer, *National Institute of Health (NIH)* grant, Research Pilot Projects, September 2016.

Reviewer of books and book chapters

32. Reeder, L. *Print Reading for Commercial Construction*
33. Sachs, N. and Cooper-Marcus, C. "The Business Case for Therapeutic Gardens and Views to Nature," 2012.
34. Reviewer, for Oxford University Press, Carrie Brandon, Executive Editor of English, *Writing in Engineering: A Brief Guide*.

External reviewer of dissertations

32. External examiner for doctoral candidate, Ms. Natália Ransolin: "A framework of built environment design knowledge supportive of resilient internal logistics in hospitals," for the Escola de Engenharia (EE), Universidade Federal de Rio Grande do Sul, Brazil, and the Australian Institute of Health Innovation, Macquarie University, Australia, for Thesis Supervisors: Profs. Carlos Formoso (University of Salford, UK), Tarcisio Abreu Saurin (UFRGS, Brazil), Robyn Clay-Williams (UNSW, Australia), Frances Rapprt (Staffordshire University, UK), with examiners Profs. Daniela Dietz Viana (UFRGS, Brazil), and Alessandro Jatobá (UFRJ, Brazil), Date of defense: November 13, 2023.
33. External examiner for doctoral candidate, Mr. Wassim Albalkhy: "The ontology of lean construction 4.0 in the construction industry," for Laboratoire de Mécanique Multi physique et Multi echelle "Multi-physics and Multi-scale Mechanics Laboratory," Ecole Centrale de Lille, France, for Thesis Director, Prof. Zoubeir Lafhaj, with committee members Profs. Martin Fischer (Stanford), Lauri Koskela (Huddersfield), and Miroslaw Skibniewski (Maryland): Date of defense: September 18, 2023.
34. Pre-examination external examiner for doctoral candidate, Mr. Thabiso Godfrey Monyane: "Evaluation of infrastructure delivery improvement programme: Towards a Target Value Design of Construction

Projects,” for the Faculty of Engineering, Built Environment and Information Technology at the Nelson Mandela Metropolitan University, Professors Gerrit J. Crafford and Fidelis A. Emuze: June 22, 2016; Final review of dissertation of Tabisco Godfrey Monyane: “A lean-led evaluation of infrastructure development improvement programme in South Africa”; Date of signed final review: August 30, 2019.

35. Pre-examination reviewer for doctoral candidate, Ms. Tuuli Jylhä: “Creating value or waste? Evaluating real estate service processes with lean thinking,” for the Aalto University School of Engineering, Aalto, Finland, July 5, 2013.

Work mentioned by others in popular press

- The National Academy of Science, Engineering, and Medicine, “Your Future in Transportation,” <<https://www.youtube.com/watch?v=YkT4UZL-tpo>>, See 2:02-2:12.
- **NSF Science Nation documentary:** “Engineering smart building skins for cleaner, greener architecture,” film released on November 4, 2019, about shape-memory polymer research for awarded NSF-EAGER grant <<https://www.youtube.com/watch?v=DMFpFgF27-k&t=84s>>
- “Simulations to reduce waste and add value at the construction job site,” Youtube presentation (produced by John Peters, TAMU COA): released on September 11, 2019 <<https://www.youtube.com/watch?v=Xg9rWE3qj2M>>
- Target Value Design/Lean-IPD expertise featured in article by Elizabeth Evitts Dickinson, “Learning to Lean In” in *Architect* (the Journal of the American Institute of Architects), May 4, 2017, <http://www.architectmagazine.com/practice/learning-to-lean-in_o>.
- Blog by Paul Ebbs: “Target Value Design and the Marshmallow Team Building Game.” Author discussed success of simulation developed in our TAMU lab to transfer knowledge principles of Target Value Design to an actual IPD capital project <<http://www.umstotsolutions.com/our-blog/target-value-design-and-the-marshmallow-team-building-game/>>, blog posted July 9, 2015.
- Presentation: “Moving toward and Evidence-Based Design Practice” given on June 15, 2012, for the AIA Lean Design Forum, St.Charles, MO; posted on Vimeo <<https://vimeo.com/search?q=zofia+Rybkowski>>
- Unique methods of educating “building technologists” at Texas A&M described on pg. 61-62 in 2014 book by Cliff Moser: *Architecture 3.0: The disruptive design practice handbook*, Routledge, NY.
- Presentation on Target Value Design research described on pg. 11 of *Construction Sites*, Issue No. 80 (March 2014) in article “Seminar examines the novel concept of lean construction.”
- Interviewed and acknowledged as contributor for content for: Sayer, N. J. and Anderson, J. A. J. (2012). *Status of Lean in the US Construction Industry*, Rider Levett Bucknall, July.
- Presentation quoted in *A Room with a View: How Evidence-Based Design Leads to Better Outcomes*, by Barbara Pantuso, February 19, 2010, Design Well section of website, *Design Mind*, <<http://designmind.frogdesign.com/blog/a-room-with-a-view.html>>.

PRESENTATIONS

Peer-reviewed

1. *TRB Conference on Advancing Additive Manufacturing and Construction in Transportation*, “Impact of Geometry on Performance in the Built Environment and Its Potential for 3D Printing,” with Mehdi Farahbaksh, University of Texas; and Negar Kalantar, California College of the Arts, Irvine, CA, November 8, 2024.
2. *32nd Annual Conference of the International Group for Lean Construction (IGLC32)*. “The Repair-Co Game: A roadmap to demonstrate the importance of problem-solving capabilities of Lean tools,” Auckland, New Zealand, July 1-7, 2024.
3. *Texas Conference on Joint Student Success (TXCSS)*, “Solar Texas: Building Capacity for Passive Survivability,” with Filza Walters and Greg Luhan, Texas A&M University, College Station, TX, October 4, 2023 (poster).
4. *31st Annual Conference of the International Group for Lean Construction (IGLC31)*. “Exploration of educational backgrounds, personality traits, and gender on tendencies to collaborate among owners, architects, engineers, and contractors,” Lille, France, June 26-July 2, 2023, **selected for plenary presentation**.
5. *31st Annual Conference of the International Group for Lean Construction (IGLC31)*. “Development and testing of a digital lean tool to sharpen motion and transportation waste recognition,” Lille, France, June 26-July 2, 2023.
6. *30th Annual Conference of the International Group for Lean Construction (IGLC30)*, “Developing & testing a value stream map simulation: Helping the construction industry learn to see,” Edmonton, Canada, July 27-29, 2022.
7. *30th Annual Conference of the International Group for Lean Construction (IGLC30)*, “Building interdisciplinary teams through student design competitions: A case study,” Edmonton, Canada, July 27-29, 2022.
8. *The 9th International Conference on Construction Engineering and Project Management*, “Hazard Recognition and Construction Safety Training Efficacy using Interactive Virtual Reality (VR),” Las Vegas, NV, June 20-23, 2022.
9. *29th Annual Conference of the International Group for Lean Construction (IGLC29)*, “The emergence and growth of the on-line serious games and participatory simulation group ‘APLSO,’” Lima, Peru, July 15, 2021 (virtual).
10. *29th Annual Conference of the International Group for Lean Construction (IGLC29)*, “Development and testing of the 5S puzzle game,” presented with co-author Rajeswari Obulam, Lima, Peru, July 15, 2021 (virtual).

11. *28th Annual Conference of the International Group for Lean Construction (IGLC28)*, “Reducing Handoffs between Sequential Trades: A Simulation,” presented with co-authors Meng Wai Yaw and H. David Jeong, Berkeley, California, USA, July 6-12, 2020 (virtual).
12. *27th Annual Conference of the International Group for Lean Construction*, “Architectural programming simulation (demonstration),” presented with co-author James Smith, Dublin, Ireland, July 4, 2019.
13. *27th Annual Conference of the International Group for Lean Construction*, “Development and testing of an innovative architectural programming simulation (research presentation),” Dublin, Ireland, July 3, 2019.
14. *55th Associated Schools of Construction Annual International Conference*, “Assessment of an experimental five-day graduate student construction science ‘bootcamp’ at a research-intensive university: A case study,” presented with co-author Boong Yeol Ryool, Denver, CO, April 11, 2019.
15. *26th Annual Conference of the International Group for Lean Construction*, “The evolution of lean construction education (Part 1 of 2): At US-based universities,” Chennai, India, July 20, 2018.
16. *26th Annual Conference of the International Group for Lean Construction*, “The evolution of lean construction education (Part 2 of 2): At US-based companies,” Chennai, India, presented by co-author Dr. Lincoln Forbes, July 20, 2018.
17. *Symposium—Lean Construction: 25 years of development (KoskelaFest)*, “Strategies for Educating the Lean OAEC Community,” Huddersfield University, Huddersfield, UK, January 11-12, 2018.
18. *25th Annual Conference of the International Group for Lean Construction*, “Delivery methods and social network analysis of unethical behavior in the construction industry,” Heraklion, Greece, presented by co-author Dr. Glenn Ballard, July 11, 2017.
19. *25th Annual Conference of the International Group for Lean Construction*, “An Exploration of Compatibility of U.S. Army Culture and Lean Construction,” Heraklion, Greece, presented by co-author and former PhD student, Dr. James P. Smith, July 12, 2017.
20. *24th Annual Conference of the International Group for Lean Construction*, “Development and testing of a lean simulation to illustrate key principles of Target Value Design: A first run study,” Boston, MA, July 21, 2016.
21. *22nd Annual Conference of the International Group for Lean Construction*, “Simulation of Collective Kaizen and Standardization,” Oslo, Norway, June 26 & 27, 2014.
22. *22nd Annual Conference of the International Group for Lean Construction*, “Collective Kaizen and Standardization: The Development and Testing of a New Lean Simulation,” Oslo, Norway, June 26, 2014.
23. *21st Annual Conference of the International Group for Lean Construction*, “The Maroon-White game: a simulation of trust and long-term gains and losses,” Fortaleza, Brazil, August 1, 2013.
24. *21st Annual Conference of the International Group for Lean Construction*, “Teaching lean construction--perspectives on theory and practice,” with Dr. Farook Hamzeh, Fortaleza, Brazil, August 1, 2013.

25. *21st Annual Conference of the International Group for Lean Construction*, “On the back of a cocktail napkin: An exploration of graphic definitions of lean construction,” Fortaleza, Brazil, July 31, 2013.
26. *20th Annual Conference of the International Group for Lean Construction*, “Survey instrument to facilitate continuous improvement of lean teaching materials: A first run study,” San Diego, CA, July 18, 2012.
27. *20th Annual Conference of the International Group for Lean Construction*, “Cost comparison of collaborative and IPD-like project delivery methods versus competitive non-collaborative project delivery methods,” San Diego, CA, July 19, 2012.
28. *19th Annual Conference of the International Group for Lean Construction*, “Impact of cost constraints on aesthetic ranking following Target Value Design exercises,” Lima, Peru, July 13-15, 2011.
29. *18th Annual Conference of the International Group for Lean Construction*, “Last Planner and Its Role as Conceptual Kanban,” Haifa, Israel, July 14-16, 2010.
30. *18th Annual Conference of the International Group for Lean Construction*, “Last Planner System—Implementation Challenges,” Haifa, Israel, July 14-16, 2010.
31. *16th Annual Conference of the International Group for Lean Construction*, “Using controlled experiments to calibrate computer models: the Airplane Game as a lean simulation exercise,” Manchester, UK, July 16, 2008.
32. *16th Annual Conference of the International Group for Lean Construction*, “Using the ‘Five Whys’ as a decision-making framework for Evidence-Based Design,” Manchester, UK, July 17, 2008.
33. *Association of Collegiate Schools of Architecture 2000 International Conference*, Hong Kong, June 10-14.

Invited (non-peer-reviewed) Speaker

1. Workshop Presenter, with Ragavi Prabakaran for “Extended Repair-Co Game (aka. Strategic Lean Problem Solving),” on Simulation Day, *International Group for Lean Construction Conference*, Auckland, New Zealand, July 4, 2024.
2. Workshop Presenter, with LIPS Chair Amr Abdel-Azim, on “Lean Thinking, Lean-in-Public-Sector & Target Value Design” for *Lean In the Public Sector*, Workshop Day, *International Group for Lean Construction Conference*, Auckland, New Zealand, July 2, 2024,
3. Workshop Presenter: *Institut Français de la Construction Lean (IFCL)*, Fundamentals of Target Value Design, Lille, France, April 12, 2024 (fully sponsored).
4. Workshop Presenter: *Institute for Lean Construction Excellence Conference*, Lean in the Public Sector (LIPS) Workshop, Delhi, India, with Co-Presenter and LIPS Director, Amr Abdel-Azim, November 29 & 30, 2023, Delhi, India (fully sponsored).
5. **Plenary Speaker:** *Institute for Lean Construction Excellence Conference*, Lean in the Public Sector (LIPS) Introduction, Delhi, India, with Co-Presenter and LIPS Director, Amr Abdel-Azim, November 28, 2023, Delhi, India (fully sponsored).

6. Featured Speaker: *Seminar Series in Architecture and the Built Environment*, University of Huddersfield, UK, "The Complete Guide to Serious Games and Simulations for Lean-Integrated Project Delivery," November 8, 2023 (virtual).
7. **Selected Speaker:** *24th Lean Construction Congress*, "The Complete Guide to Serious Games & Simulations in Lean Construction," New Orleans, LA, October 19, 2022 (with champion Cynthia Tsao).
8. **Pre-Conference Workshop Presenter:** *Target Value Design Simulation*, 9th ICCEPM (International Conference on Construction Engineering and Project Management), Las Vegas, NV, June 20-23, 2022, for Lean Design and Construction session on June 20, 2022.
9. **Presenter**, "Adding to the Educator's Tool Chest with AGC Case Studies," 9th ICCEPM (International Conference on Construction Engineering and Project Management), Las Vegas, NV, June 20-23, 2022, for Lean Design and Construction session on June 21, 2022 (with Dr. John Schaufelberger, AGC and former Dean, University of Washington).
10. *Natural-Built-Virtual 2022: School of Architecture Research Symposium* (Academic Minute audio-recording), "Making Smarter Construction Management Decisions," October 3, 2022 (final presentation delivered by graduate student Yasaman Arefazar).
11. **Keynote Speaker:** *ILCC (Institute for Lean Construction Excellence) 2021 Conference*, "Understanding Lean through Simulations & the 'Aha moment'," December 3, 2021 (date in India time zone; virtual), with honorarium.
12. *Natural-Built-Virtual 2021: College of Architecture Research Symposium* (with Academic Minute audio-recording), "Multi-functional and sustainable materials for 3D-printing environmentally adaptive resilient buildings," October 4, 2021.
13. **Keynote Speaker:** *ASQ DCD/EED Joint Conference*, "Lean-Integrated Project Delivery: Serious games & simulations and the "aha moment," November 3, 2021 (virtual).
14. Joint Speaker: *CII AWP + Lean Virtual Summit*, "Lean Essentials," presented jointly with Kristin Hill and Nick Masci," September 28, 2021 (virtual).
15. Featured Speaker: *CMAA (Construction Management Association of America), North Texas Chapter*, "Technology in Lean Construction: Web-based lean training & simulations," August 19, 2021 (virtual).
16. **Keynote Speaker: 2020 Ethel Ashworth-Tsutsui Memorial Lecture Award Ceremony (selected to deliver award address)**, "Multi-functional and sustainable materials for 3D-printing environmentally adaptive resilient buildings," sponsored by the *Women in Science and Engineering (WISE)*, to celebrate the excellence of two graduate students and one post-doctoral scholar, at the College of Science Educational Outreach and Women's Programs Office, and the College of Architecture, January 17, 2020.
17. **Keynote Speaker:** *International Fall Conference 2020: Korea Institute of Ecological Architecture and Environment (KIEAE)*, "Can large-scale 3D printing usher in a paradigm shift toward environmental sustainability?" by invitation, December 4, 2020 (virtual), with honorarium.
18. Roundtable Panelist: *Autodesk University*, "Re-Imagining construction: 3D printing of large-scale structures," with Patrick Suermann, Negar Kalantar, Nathan King, Kurt Maldovan, and Mehdi Farahbakhsh, November 20, 2020 (virtual).

19. Panelist: *Advancing Pre-Construction Conference* (Pre-Conference Workshop Day), “Hearing experiences and lessons learned with Target Value Design in Practice”: with fellow panelists, Rebecca Snelling (JE Dunn), and Jacob Keith (Layton Construction), November 3, 2020 (virtual).
20. *Innovations in Materials and Processes for 3D Printing of Structures* (Conference): “In-situ resource utilization and reconfiguration of soils into construction materials for the additive manufacturing of buildings,” with Sarbajit Banerjee, Texas A&M-Qatar, Education City Doha, Qatar, December 16, 2019, (fully sponsored).
21. *Celebration of Learning: Reimagining the Future* (50th Anniversary celebration of the College of Architecture), “3D-printing, robots, and drones,” by invitation, with Ryan Ahn and Brent Fortenberry, Texas A&M University, November 15, 2019.
22. **TEDx-TAMUSalon**: Seeking truth: The luminous power of serious games and simulations, Rudder Forum, Texas A&M University, College Station, TX, November 11, 2019.
23. **Keynote Speaker**: *International Group for Lean Construction Summer School*: “Defining the problem statement,” Waterford Institute of Technology, Waterford, Ireland, July 6, 2019.
24. *Natural-Built-Virtual 2019: College of Architecture Research Symposium*, “Development and testing of an innovative architectural programming simulation as a precursor to Target Value Design,” Texas A&M, College Station, TX, September 16, 2019.
25. *Natural-Built-Virtual 2019: College of Architecture Research Symposium*, “The future is interdisciplinary: How the Harold Adams interdisciplinary charrette for undergraduates increases interdisciplinary competence,” with co-presenter Katie Reed, Texas A&M, College Station, TX, September 16, 2019.
26. *Natural-Built-Virtual 2019: College of Architecture Research Symposium*, “Multifunctional and sustainable materials for 3D printing environmentally adaptive resilient buildings,” with co-presenter Manish Dixit, Texas A&M, College Station, TX, September 16, 2019.
27. *Climate Change Debate*, with Gary Boldt, Texas A&M, College Station, TX, April 15, 2019.
28. *President's Excellence Fund Symposium, X-Grant*: “Multi-functional and sustainable materials for 3D-printing environmentally adaptive resilient buildings,” Frymire Auditorium, Walter and Leonore Annenberg Presidential Conference Center, Texas A&M University, College Station, TX, April 4, 2019.
29. *International Workshop on 3D printing Technology & Material Design for Intelligent Infrastructure*: “3D printing in the built environment: Today and tomorrow”, with co-presenters Bjorn Birgisson and Manish Dixit, National Center for Materials Service Safety, University of Science and Technology, Beijing, March 10, 2019.
30. *Project Production Systems Laboratory (P2SL) Lean Design Forum*: “Teaching Architectural Design” (on set-based design/lean), with co-presenter Alireza Borhani and contributor Negar Kalantar, Berkeley, CA, January 25, 2019.
31. *Natural-Built-Virtual 2019: College of Architecture Research Symposium*, “The evolution of lean construction education (Part 1 of 2): At US-based universities” Texas A&M, College Station, TX, October 29, 2018.

32. *National Institute of Building Sciences, Building Innovation 2018 Conference & Expo: Sustain, Strengthen, Secure, "3D-Printing in the Built Environment: Today and Tomorrow,"* Washington DC, January 11, 2018 (presented by team members Bjorn Birgisson, Manish Dixit, and Negar Kalantar).
33. *Brazos Value Project Managers (BVPM): "Teaching robots additive manufacturing with geofoam, or How to revolutionize a construction industry in 6 weeks,"* with Julian Kang and Amir Behzadan, College Station, TX, September 10, 2018.
34. *Natural-Built-Virtual 2018: College of Architecture Research Symposium, "The evolution of lean construction education (Part 1 of 2): At US-based universities"* Texas A&M, College Station, TX, October 29, 2018.
35. *Hong Kong University of Science and Technology, "Introduction to Lean-Integrated Project Delivery for the Built Environment: An Interactive Workshop,"* Hong Kong, SAR, September 22, 2018 (fully sponsored).
36. Panelist, "Is urbanization helping or hampering SDG progress?—Attaining SDGs in cities," *Philanthropy for Better Cities Forum*, sponsored by the Hong Kong Jockey Club, Hong Kong, SAR, September 21, 2018, (fully sponsored).
37. *Natural-Built-Virtual 2017: College of Architecture Research Symposium, "Facility management in Qatar: Current state, perceptions, and recommendations"* Texas A&M, College Station, TX, October 23, 2017.
38. ***National Science Foundation Workshop on Additive Manufacturing for Civil Infrastructure Design and Construction***, "Performative 3D Printed Building Skins: Towards and Adaptive Built Environment," Arlington, VA, July 13, 2017, with co-presenter Negar Kalantar (fully sponsored).
39. Facilitation and presentation, *Advancing Building Estimation 2017 conference*, "Introduction to Target Value Design," Houston, TX, May 22, 2017 (with co-presenter Danny Kahler).
40. *Ministry of Housing Building Research Committee: "Developing innovation and lean processes in the building industry,"* Vancouver, BC, Canada, April 19, 2017 (fully sponsored).
41. *Rowlett Lecture, "Visions for Collaboration"* (panelist), with Harold Adams, Shannon Van Zandt, Tim McLaughlin, Robert Warden, as follow-up to Elizabeth del Monte's presentation "Elbowing our way into collaboration," Texas A&M University, College Station, TX, March 29, 2017.
42. *National Institute of Building Sciences, Building Innovation 2017 Conference & Expo: Collaborating for a High Performing Future, "Serious Games and Simulations: Transforming culture to enhance building project delivery,"* Washington DC, January 10, 2017.
43. *Construction Industry Institute (CII)*, Facilitation and presentation, "How research is changing hospital design," Jersey City, New Jersey, October 24-25, 2016
44. *Healthcare Design Expo and Conference 2016: TAMU First Look Colloquium, "An Introduction to lean construction serious games and simulations,"* Houston, TX, November 15, 2016.

45. *Natural-Built-Virtual 2016*: College of Architecture Research Symposium, "Trainathon Lean Simulation Game: Determining Perceptions of the Value of Training Among Construction Stakeholders," Texas A&M, College Station, TX, October 24, 2016 (presented by Jose Fernandez-Solis)
46. *Associated Schools of Construction*, Region 3: "An introduction to lean construction serious games and simulations," Downers Grove, IL (via Skype), October 14, 2016
47. *Construction Industry Institute (CII) Annual Conference*, *Research Committee*: "Advancing with the employees you have now: Strategically coupling continuous improvement & standardization in IPD," National Harbor, MD, August 1, 2016.
48. *Construction Industry Institute (CII) Annual Conference*, *Academic Committee*: "Lean simulations: Tools for academic and professional research," National Harbor, MD, July 31, 2016.
49. *American Society of Professional Estimators (ASPE, Chapter 9)*: "Introduction to Lean Construction," New Orleans, LA (via Skype), March 11, 2015.
50. *National Association of Women in Construction (NAWIC)*: "Introduction to Lean Construction," Houston, TX, March 10, 2015.
51. *Natural-Built-Virtual 2014*: College of Architecture Research Symposium, "Collective kaizen and standardization: the development and testing of a new lean simulation," Texas A&M, College Station, TX, October 27, 2014.
52. *2014 International Highway Engineering Exchange Program (iHEEP) Conference*, "Applying lean construction principles to project delivery information flow," New Orleans, LA, September 30, 2014.
53. *2014 International Highway Engineering Exchange Program (iHEEP) Conference*, "Interactive demonstration of lean construction principles," New Orleans, LA, September 30, 2014.
54. *University of Kentucky*, "Alignment Workshop for Experimental Mining Research Facility," May 29, 2014, Lexington, KY.
55. *Joeris General Contractors*, "What is Lean Construction?" (luncheon workshop), May 16, 2014, San Antonio, TX.
56. *Green Tech Medical Space Design*, "Architecture as Medicine: What is it? And is it affordable?" Seoul, Korea, November 22, 2013 (fully sponsored).
57. **Keynote Speaker**: *KIEAE (Korea Institute of Ecological Architecture and Environment)*, "Architecture as Medicine: What is it? And is it affordable?" Seoul, Korea, November 21, 2013 (fully sponsored).
58. *Konyang University*, "Architecture as Medicine: What is it? And is it affordable?" Seoul, Korea, November 19, 2013 (fully sponsored).
59. *LCI (Lean Construction Institute) Congress 2013*, "Advancing with the employees you have now: Strategically coupling collective kaizen & standardization in IPD," Dallas, TX, October 23, 2013.

60. *Natural-Built-Virtual 2013*: College of Architecture Research Symposium, "On the back of a cocktail napkin: An exploration of graphic definitions of lean construction," Texas A&M, College Station, TX October 21, 2013.
61. *2013 World Conference on Quality and Improvement*: "The Impact of Lean Construction, IPD and Collective Kaizen on Project Cost Performance," Indianapolis, IN, May 6, 2013.
62. **Keynote Speaker**: *Arch 12 Conference: Architecture / research / care / health--Perspectives on Nordic welfare environments*, Chalmers University of Technology. Invited speaker for presentation entitled: "Lean Thinking and Target Value Design: Overcoming the hurdle of first cost," Gothenbrug, Sweden, November 12, 2012 (fully sponsored).
63. *Health Industry Advisory Council (HIAC)*, with Dr. Mardelle Shepley, "Practitioner-focused facility evaluation in an international context," College Station, TX, November 2, 2012.
64. *Natural-Built-Virtual 2012*: College of Architecture Research Symposium, "Cost comparison of collaborative & IPD-like project delivery methods versus competitive non-collaborative project delivery methods," Texas A&M, College Station, TX, October 22, 2012.
65. *Construction Industry Advisory Council*, Annual meeting, "Report on Lean Construction Training Modules," College Station, TX, October 19, 2012.
66. *1st annual BIM, IPD, Lean (BIL) Forum*, hosted by CIMA Strategic Services/IPD Assured, "Graphic definition of lean construction," Austin, TX, January 27, 2012.
67. *Healthcare Design'11* (National Conference), "Target Value Design: Making Evidence-Based Design Financially Feasible," Nashville, TN, November 16, 2011.
68. *Natural-Built-Virtual 2011*: College of Architecture Research Symposium, "Impact of Cost Constraints on Aesthetic Ranking Following Target Value Design Exercises," Texas A&M, College Station, TX, October 24, 2011.
69. *Lean Construction Institute (LCI)*, Houston, "Push versus Pull," Houston, TX, July 26, 2011 (with graduate students Manish Munankami and Aditi Kulkarni)
70. *9th Annual LCI/P2SL*, AIA Design Forum, "Moving toward an evidence-based practice," St. Charles, MO, June 15, 2012.
71. *8th LCI Academic Forum*, "Developing a consensus on the definition of lean construction: The cocktail napkin game," Boulder, CO, May 17, 2012.
72. *International Group for Lean Construction* (mid-year meeting), "Defining Lean Construction: Cocktail napkin exercise," New York, NY, February 22, 2011
73. Department of Construction Science, *Research Road Tour 2010*, "Lean construction and optimizing the project cost," San Antonio, TX, May 17, 2010; Austin, TX, May 18, 2010; Dallas, TX, May 24, 2010; and Houston, TX, May 25, 2010.
74. *Architecture for Health Visiting Lecture Series*: "Target Value Design: Making Evidence-Based Design Financially Feasible," Texas A&M University, College Station, TX, April 21, 2010.

75. *Evidence-Based Practice Boot Camp*, Center for Health Systems and Design, "Target Value Design: Making Evidence-Based Design Financially Feasible," Texas A&M University, College Station, TX, April 8, 2010.
76. *Annual meeting of the Health Industry Advisory Council*, Faculty Speaker, "Target Value Design," October 29, 2010.
77. *Architecture for Health Visiting Lecture Series*, Sponsored by the Center for Health Systems Design, Texas A&M University, "Target Value Design: Making Evidence-Based Design Financially Feasible," May 21, 2010.
78. *Business of Healthcare* (Annual Conference at UC Berkeley, Haas School of Business), Invited panelist for session entitled: "The Promise of User-Focused Design for Healthcare," Berkeley, CA, February 6, 2010.
79. *Healthcare Design'09* (National Conference), "Target Value Design: Making Evidence-Based Design Financially Feasible," Orlando, FL, October 31-November 3, 2009.
80. *Natural-Built-Virtual 2009*: College of Architecture Research Symposium, "Overcoming the hurdle of first cost: Action research in Target Costing," Texas A&M, College Station, TX, October 19, 2009.
81. *Case Study Writing Workshop for the Built Environment*, "Case study writing as an entrée to research with your graduate students," College of Architecture, Texas A&M, College Station, TX, October 16, 2009.
82. *International Facility Management Association (IFMA)*, "Target Costing and Evidence-Based Design in Healthcare: Overcoming the Hurdle of First Cost," San Francisco, CA, May 11, 2009.
83. *Healthcare Design'08* (National Conference), "Meeting the Challenge of First Cost," Washington DC, Nov. 10, 2008.
84. *Healthcare Design'07* (National Conference), "Overcoming the Hurdle of First Cost," Dallas Texas, Nov. 5, 2007.
85. *Project Production Systems Laboratory Annual Meeting*, "Capital Budgeting Decision Tool for Evidence-Based Design," Berkeley, CA, Feb. 6, 2008.
86. *P2SL-TEKES Healthcare Facilities Conference*, "Developing a tool for Evidence-Based Design Investment (EBDI) Analysis during Capital Budgeting of Healthcare Facilities," Berkeley, CA, Feb. 20, 2007.
87. *Project Production Systems Laboratory Annual Meeting*, "Developing a tool for Evidence-Based Design Investment (EBDI) Analysis during Capital Budgeting of Healthcare Facilities," Berkeley, CA, Feb. 7, 2007.
88. *International Group for Lean Construction* (midyear meeting), "Investigation of Graphics for teaching target value design and lean construction," New York, NY, February 21, 2011.
89. *Lean Construction Institute (LCI) Design Forum*, "Toward Product and Service Differentiation in the AEC industry," Chicago, IL, presented at the annual meeting, June 16-17, 2005.

90. *Hong Kong Institution of Engineers*, presented at the monthly technical meetings/seminar series, “Can a structural engineer design architecture?” Hong Kong, April 13, 2004.
91. *Master of Interdisciplinary Design + Management (MIDM)*, University of Hong Kong, “What is Good Design?” Hong Kong, Spring 2004.
92. *Arup*, “What is Good Design?” Hong Kong, 2002-2004 (invited to give multiple presentations at first year engineering employee retreat)

TEACHING

COURSES TAUGHT

1. **COSC 690: Theory of Research in Construction Management**
3 credits, Texas A&M University
 Spring 2010
 Introduction to research, research tools, proposal writing and research reports; emphasis placed on research planning and design; review of literature through qualitative and quantitative research methodologies; emphasis on defining research problems in construction science and the development of research proposals.
2. **COSC 689: Architectural and Construction Robotics**
3 credits, Texas A&M University
 Spring 2021
 Introduction to topics related to hardware, programming, fabrication and materials as related to advancements in automated fabrication within the field of architecture/construction science. Beyond teaching the basics of utilizing industrial robotics in the field of architecture/construction, the course develops skills in hands-on simulation, on-line programming, visual programming, tool design, and automated workflow development. Students work within a lab environment to develop their expertise in using robotic equipment safely. With co-instructor, Mehdi Farahbakhsh.
3. **COSC 689: Life Cycle Cost Analysis—Long-term Sustainability**
3 credits, Texas A&M University
 Fall 2010, Spring 2012
 Foundation in Life-Cycle Cost Analysis computation within the context of current issues in (1) environmental sustainability, and (2) evidence-based thinking. Lean construction also discussed as a strategy to overcome the hurdle of first cost.
Developer of first course on Life Cycle Cost Analysis in the Department of Construction Science at Texas A&M
4. **COSC 663: Sustainable Construction**
3 credits, Texas A&M University
 Fall 2015, Fall 2016, Fall 2017, Fall 2019, Fall 2021, Fall 2022, Fall 2023, Fall 2024
 Contribution of materials and methods to meeting the needs of the present without compromising the ability of future generations to meet their own needs; overview of international, national and local programs promoting sustainable construction; characteristics of the components of successful sustainable construction projects; theories and practices through case studies.
5. **COSC 648: Graduate Capstone**

3 credits, Texas A&M University

Spring 2015, Spring 2016

For students preparing to enter the construction industry; project and program management of construction projects; winning new work; construction company creation, operations and change accommodation; leadership and management; risk management; managing people; using technology; considering the environment; and the application of lean and target value construction.

6. COSC 631: Advanced Productivity and Lean

3 credits, Texas A&M University

Spring 2014, Spring 2015, Spring 2016, Spring 2018, Spring 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024

Introduction to lean history, concepts and methods; deduction of basic training modules in lean project delivery; application of lean management in construction projects.

7. COSC 621: Advanced topics in Construction Project Scheduling

3 credits, Texas A&M University

Spring 2011

Advanced techniques used in scheduling and evaluation progress in construction project control; development of strategies for overcoming overruns; resource allocations; case studies.

8. COSC 603: Construction Scheduling

3 credits, Texas A&M University

Spring 2013

Construction scheduling process utilizing current techniques including critical path method, precedence method, program evaluation and review techniques, and probabilistic method; development of parameter estimates for activities that relate to the construction of a building project; work packages sequenced, planned and leveled to develop a working project execution document; development of procedures to monitor actual field progress; computer application in project scheduling. (3-0). Credit 3. Prerequisite: Graduate level.

9. COSC 489: Lean Construction

3 credits, Texas A&M University

Fall 2011, Fall 2012, Fall 2013

Introduction to lean history, concepts and methods, deduction of basic training modules in lean project delivery; application of lean management to construction projects.

Developer, with Jose Fernandez-Solis, of first course on Lean Construction at Texas A&M University

10. COSC 475: Construction Project Planning

3 credits, Texas A&M University

Fall 2009, Spring 2010

Development of parameter cost estimates for activities that relate to the construction of a building project; work packages sequenced, planned and leveled to develop a working project execution document; development of procedures to monitor actual field progress.

11. COSC 175: Construction Graphics Communications

3 credits, Texas A&M University

Fall 2011, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Spring 2019, Fall 2019

Learn to visualize, interpret, and communicate graphical geometry employed in construction design and engineering, to include the graphical analysis of problems. Includes the utilization of sketching applications,

computer aided design, and basics of building information modeling software. An introduction of commonly employed quantitative tools in construction is covered.

12. COSC 153: Introduction to the Construction Industry

3 credits, Texas A&M University

Fall 2010

Characteristics of the construction industry; types of construction companies; contracts; people involved in a project, their responsibilities and interrelationships; evolution of a project; interpreting working drawings; construction bonds; contract documents.

STUDENT THESIS COMMITTEE MENTORSHIP

PhD Students

Chair / Co-Chair

1. Hameedullah Ehsas, PhD, Construction Science (expected graduation 2026)
Identification of factors impacting the labor productivity of Metal Stud framing and Drywall workers (working title)
2. Maryam Mansoori, PhD, Architecture, graduated 2023
Toward material-driven adaptive architecture: An exploration of transformable surfaces with shape-memory behavior
3. Mehdi Farahbakhsh, Architecture, graduated 2021
Opportunities and challenges of robotically assisted 3D printing of shell structures
4. James P. Smith, Architecture (with emphasis in construction science), graduated 2013
Trust building in the construction delivery process: A relational look-ahead tool for managing trust

Committee Member

1. Daniel J. Bonner, PhD, Chemistry (expected graduation 2025)
2. William Jones, PhD, Construction Science (withdrew in 2024)
3. Suryeon Kim, PhD, Construction Science, 2024
Strategic approaches for accelerating effective sharing and disseminating construction management knowledge and methods
4. Hamed Alikhani, PhD, Multidisciplinary Engineering, 2023
Data-driven approaches to enhancing highway project time estimation
5. Milad Ashtab, PhD, Construction Science, 2023
Predicting construction hiring considering impact of extreme events: Economic and political factors through machine learning-based direct, SEQ2SEQ and spatial-temporal models
6. Umme Zakira, PhD, Civil Engineering, 2022
Development of low carbon footprint building materials
7. Md Ashrafuzzaman Khan, PhD, Civil Engineering, 2021
Effectiveness of geocell reinforced recycled asphalt pavement base layer for flexible pavement system over expansive subgrades
8. Neeraj Yadav, PhD, Architecture, 2021
Pivot: A framework for minimizing stress deviations in structural form
9. Mehdi Azizkhani, PhD, Architecture, 2019
Promoting the incorporation of natural/passive systems into the design of sustainable buildings in the US

10. Hyoungsub Kim, PhD, Architecture, 2018
A model for performance evaluation of climate-adaptive building envelopes using parametric models and multi-criteria optimization
11. Yang Liu, PhD, Architecture, 2017
Human-tool interaction-based action recognition framework for automatic construction operation monitoring
12. Gregory Luhan, PhD, Architecture, 2016
Measurement of self-efficacy, predisposition for collaboration, and project scores in architectural design studios
13. Seyeon Lee, PhD, Architecture, 2016
The impacts of cost determinism in architectural foundation design education: An analysis of cost indicators
14. Chao Xiao, PhD, Architecture (with emphasis in construction science), 2015
Comparative analysis of entropy algorithms to determine the most effective technique for measuring complexity in building construction
15. Sayed Saleh Kalantari Hematabadi, PhD, Architecture, 2014
Toward and effective design process: Enhancing building performance through better integration of facility management perspectives in the design process
16. Joo Hyun Lee, PhD, Architecture, 2014
An analysis of relationships between the Green Building Certification System for Multi-Family housing (GBCS-MF) scores and resident perception ratings in Korea
17. Xiaodong Xuan, PhD, Architecture, 2012
Exploring the effectiveness of LEED certification in LEED certified healthcare settings in climate zone 2 & 3
18. Rana Zadeh, PhD, Architecture, 2012
*Windows and daylight for healthcare work environments:
An evaluation of occupants' performance and wellbeing and building energy use*

Masters Students

Chair / Co-Chair

1. Yasaman Arafazar, MSCM, Construction Science, 2022
Development and testing of digital tools to sharpen worker intuition about waste recognition and productivity enhancement for the construction industry
COSC TAMU recipient: **Outstanding Masters Student Research Award**
2. Pooria Golestanirad, MSCM, Construction Science, 2022
Building interdisciplinary student teams through student design competitions: A case study
COSC TAMU recipient: **Outstanding Masters Student Service Award**
3. Meeranali Saiyad, MSCM, Construction Science, 2022
Hazard recognition and construction safety training efficacy study using virtual reality (VR)
COSC TAMU recipient: **Outstanding Masters Student Research Award**
4. Rajeswari Obulam, MSCM, Construction Science, 2021
COSC TAMU recipient: **Outstanding Masters Student Research Award**
Identifying pain points and optimal opportunities for automation in commercial construction: A qualitative analysis
5. Daniel Leal Hirsch, MSCM, Construction Science, 2019
Investigating the perception of construction science students regarding the urgency for sustainable construction: A case study in Texas
NSF travel award recipient: to present at Engineering Sustainability 2019 Conference (Pittsburgh, PA, April 7-9, 2019)
6. Fatemeh Solhjoui (Ellie) Khah, MSCM, Construction Science, 2018
COSC TAMU recipient: **Outstanding Graduate Student Research Award**

- Developing and testing an innovative architectural programming simulation as a precursor to Target Value Design*
7. Nikita Bhagat, MSCM, Construction Science, MSCM, Construction Science, 2018
Modulating natural ventilation to enhance resilience through nozzle profiles
 8. Ralph Salazar, MSCM, Construction Science, 2017
An exploration of military health facility developers' perceptions of evidence-based design, Choosing by Advantages, and lean culture
 9. Muzafar Thameem, MSCM, Construction Science, 2017
Delivery methods and social network analysis of unethical behavior in the construction industry: An exploratory study
 10. Rajat Gupta, MSCM, Construction Science, 2016
A framework for EPBT calculation of roof-mounted photovoltaic systems
 11. Yamini Bhatt, MSCM, Construction Science, 2016
Trainathon lean simulation game: Determining the perception of value of training among construction stakeholders
 12. Noorien Bhaidani, MSCM, Construction Science, 2016
Development and testing of a simulation to illustrate reliability in schedule through percent planned complete
 13. Navya Nadiminti, MSCM, Construction Science, 2016
Development and testing of a simulation to illustrate how to lower the river to reveal the rocks
 14. Anush (Yadav) Neeraj, MSCM, Construction Science, 2016
Framework to link lean simulations principles and their manifestation on construction projects
 15. Mark Behm, MSCM, Construction Science, 2015
The implementation of Target Value Design from the perspective of a mid-sized residential builder: A case study
 16. Vaarun Chhajer, MSCM, Construction Science, 2015
Investigation into the development and application of simulations in lean construction
 17. Huazhang Huang, MSCM, Construction Science, 2015
Exploration of implementation of the Last Planner System of Production Control by Chinese contractors: A case study
 18. Shruthi Ravi R. Iyer, MSCM, Construction Science, 2015
Engaging a multi-disciplinary literature review in the development of a framework to assess construction collaboration
 19. Nivedita Kalyanaraman, MSCM, Construction Science, 2015
Identification of long-term learning outcomes and opportunities for improvement from an interdisciplinary course in architecture, engineering and construction
 20. Ravichandra Sadhu, MSCM, Construction Science, 2015
Understanding the Lean-IPD model underlying the "Toyota Way": A case study on production planning during construction of a healthcare facility
 21. Di Ai, Construction Science, MSCM, Construction Science, 2014
The children's hospital X project: A case study in benefit and cost analysis of a Lean-IPD project
 22. Neal K. Gandhi, MSCM, Construction Science, 2014
Exploratory investigation of the impact of professional architectural education on tendencies toward work collaboration
 23. Pedro Puentes Dias, MSCM, Construction Science, 2014
Benchmarking current perceptions of general contractors of Return on Investment on affordable rehabilitation housing projects: a case study in the state of Texas
 24. Vishnu Ramanath, MSCM, Construction Science, 2014
Exploratory investigation into influence of educational background on tendency to collaborate among owners, architects, engineers, and contractors

25. Carlos Daniel Velasco Navarrette, MSCM, Construction Science, 2014
Affordable housing rehabilitation: homeowner's perspective--a case study of a veteran's program in the state of Texas
26. Manish Munankami, MSCM, Construction Science, 2012
Development and testing of simulation (game) to illustrate basic principles of integrated project delivery and Target Value Design: A first run study
27. Aditi Kulkarni, MSCM, Construction Science, 2012
Cost comparison of collaborative and IPD-like project delivery methods versus competitive non-collaborative project delivery methods
28. Shane Kulman, MSCM, Construction Science, 2012
A comparison of energy consumption between traditional exterior wall framing materials and insulated concrete forms for educational buildings in North Texas
29. Joshua Hulum, MSCM, Construction Science, 2011
Investigation to discover most effective method of teaching target costing to construction-minded individuals
30. Hea Yeon Hwang, MSCM, Construction Science, 2011
An investigation of window and lighting systems using Life Cycle Cost Analysis for the purpose of energy conservation in Langford Building A at Texas A&M University
31. Abhijeet Singh, MSCM, Construction Science, 2011
Integration of BIM and sustainability as identified by students at College of Architecture, Texas A&M University
32. Niraja Adloori, MSCM, Construction Science, 2010
Role of library as resource in built environment education: Texas A&M University TRC library as a case study
33. Dori Binion, MSCM, Construction Science, 2010
Investigating public awareness of xeriscape in Bryan, College Station, Texas: A case study
34. Yaquta Faquih, MSCM, Construction Science, 2010
Comparative analysis of the cost models used for estimating renovation costs of universities in Texas
35. Udaya Gottipati, MSCM, Construction Science, 2010
Development of a pilot study simulation to investigate the impact of target costing on team dynamics and design aesthetics
36. Payal Mukherji, MSCM, Construction Science, 2010
Study of possible applications of currently available building information modeling tools for the analysis of initial costs and energy cost for performing life cycle cost analysis

Committee Member

1. Sheyenne Davis, MS, Civil Engineering, 2022
Hot-rolled steel I-beam asymmetry as a means to increase construction efficiency (working title)
2. Jacob Metzler, MArch, Architecture, 2022.
Community Center for the timber competition of Association of Collegiate Schools of Architecture (working title)
3. Ricardo G. de la Garza, MArch, Architecture, 2022.
Community center and market in the Rio Grand Valley (working title)
4. Jackson Wendes, MLP, Land Planning Development, 2021
Via examination
5. Yangzao Li, MArch, Architecture, 2021
Pie Town Sanatorium Resort Project (working title)
6. Leela Sushitha, MS, Civil Engineering, 2021

- Characterization of laboratory-and field-compacted asphalt mixtures based on dynamic modulus testing and analysis*
7. Jason Bullen, MSCM, Construction Science, 2020
Site logistics factors affecting resources on construction sites and their relationship with embodied energy
 8. Seyed Farshid Moosavi Tabatabaei, MSCM, Construction Science, 2019
Developing a BIM-based embodied energy calculation tool
 9. Emily Cloat, MArch, Architecture, 2018
A seaside community center for veterans
 10. Deborah Madera, MArch, Architecture, 2018
Development of a STEAM school
 11. Saiedeh Sadri, MArch, Architecture, 2018
A mixed-used compound in downtown Bryan
 12. Yaqoob Khan, MSCM, Construction Science, 2018
Big data gained from connected vehicles: challenges and opportunities
 13. Sivasakthivel Ramadoss, MSCM, Construction Science, 2018
Virtual reproduction of lost buildings
 14. Neeraj Yadav, MSCM, Construction Science, 2018
Warning system for outdoor construction workers using haptic communication
 15. Xiaohan Yu, MArch, Architecture, 2018
A healthcare center in urban Texas
 16. Yasmin Farhana, MSCM, Construction Science, 2017
The Impact off view and accessibility amenities on high-rise residential properties in the city of Dhaka: A hedonic pricing model
 17. Anusree Saseendran, MSCM, Construction Science, 2017
Disputes in construction: An evaluation of contractual effects
 18. Yatin Mahesh Wadhvani, MSCM, Construction Science, 2017
Factors affecting cost of single-family dwellings in Bryan and College Station, Texas, with emphasis on curb appeal
 19. Mohammadhossein Arabzadeh, MArch, Architecture, 2016
A High-speed Dallas-to-Houston commuter rail station for Houston, TX
 20. Yatindra Athivarapu, MSCM, Construction Science, 2016
Planning-Execution transition initiatives in the construction industry: A structured literature review and directions for future research
 21. Karan Chugh, MSCM, Construction Science, 2016
Bridging with design-build and traditional design-bid-build for effective decision-making
 22. Justin Hoermann, MArch, Architecture, 2016
A shared activity center for elderly and youth in College Station, TX
 23. Bardia Jahangiri, MSCM, Construction Science, 2016
Generating optimized cutting layouts of drywall panels using building information modeling
 24. Qingye Ma, MSCM, Construction Science, 2016
Investigating the difference between LEED V2.1 and Non-LEED hospitals in energy consumption: a case study approach
 25. Sachin Singh, MSCM, Construction Science, 2016
Investigating the current state of industry foundation classes in the construction industry
 26. Ateesh Tiwari, MSCM, Construction Science, 2016
Use of a building energy model to predict energy utilization index: A comparison
 27. Hrishikesh S. Tupe, MSCM, Construction Science, 2016
Improving the Efficiency of Pre-construction Processes by Applying Value Stream Mapping Technique
 28. Geethika Yalagadda, MSCM, Construction Science, 2016

- What are the main issues in subcontracting and why do we need subcontractor management?*
29. Sima Aliabbar, MSCM, Construction Science, 2015
The perception of value of physical learning environment change among end users
 30. Jennifer Bouse, MS, Mathematics, 2015
Fractional Dimensions
 31. Andres Martinez Prieto, MSCM, Construction Science, 2015
Tolerance management of aluminum frame curtain wall systems: A case study
 32. Nishaant Saxena, MSCM, Construction Science, 2015
Work order processing times: Does BIM make a difference?
 33. Kayla Alford, MArch, Architecture, 2014
Camp and retreat center for families with disabled children
 34. Nooshin Ahmadi Esfahani, MArch, Architecture, 2014
Telecommunicating clinic for Colonias at the border of Texas-Mexico
 35. Xiaoqi Li, MSCM, Construction Science, 2014
A literature review on value stream mapping with a case study of applying value stream mapping on research process
 36. Miranda Minchew, MSCM, Construction Science, 2014
Case study on lighting retrofit implementation for life-cycle cost savings in a hospital
 37. Jordan Pennington, MArch, Architecture, 2014
Proposal for rehabilitation of industrial buildings in Sugarland, TX
 38. Shashank Tiwari, MSCM, Construction Science, 2013
Quantifying road user costs with heterogeneous value of motorists' travel time
 39. Boonchanta, Napon, MS, Civil Engineering, 2012
A tool for the analysis of real options in sustainability improvement projects
 40. Salil Jawadekar, MSCM, Construction Science, 2012
A case study of the use of BIM and construction operations: Building information exchange (COBie) for facility management
 41. Amineh Kamranzadeh, MSCM, Construction Science, 2012
Identifying the predictors of female project manager's salaries
 42. Nishi Lagoo, MSCM, Construction Science, 2012
A seminal case study on application of Last Planner System with cash flow data for improvement in construction management practices
 43. Kuangyi Tao, MArch, Architecture, 2012
Shanghai General Hospital
 44. Eva Xiaodan Luo, MArch, Architecture, 2011
Design for eye clinic in Guangzhou, China
 45. Soonrock Park, MSCM, Construction Science, 2011
Design-Build and CM-at-Risk: Comparative analysis for owner decision-making based on case studies and project surveys
 46. Nidhi Setya, MArch, Architecture, 2011
Design for hospital in Houston, Texas
 47. Vishal Porwal, MSCM, Construction Science, 2010
Last Planner System--Areas of application and implementation challenges
 48. Kaushik Ganesh, MSCM, Construction Science, 2010
Austin Central Library: Final study
 49. Kashif Hasan, MSCM, Construction Science, 2010
Assessing the active living impacts of urban design improvements: Texas Main Street Program

Undergraduate Student

Jose Torres, BS, Construction Science (expected graduation 2025)
NSF-REU student, with Chair, Dr. David Jeong
Brandon Erzen, BS, Construction Science, 2011
Comparison of AIA-201 & AIA-IPD; IFOA, AIA-IPD & AGC Consensus Docs

Invited as Guest Lecturer

Guest lectured on target value design, lean-integrated project delivery, serious games and simulations, international management, construction economics, evidence-based design, and environmental sustainability for the following colleagues:

1. Presentation to TAMU NSF-REU students, "Applying to Graduate School," Summer 2024.
2. Prof. Jyoti Trivedi, for her class, "The Maroon-White Simulation," Department of Construction Project Management, CEPT University, Ahmedabad, India, Fall 2023.
3. Profs. Steve Rodgers, Debra Ellis, Melissa Daigneault, and Aarika McCloskey, for COSC 463, Introduction to Construction Law, TAMU, Fall 2022.
4. Prof. Xi Wang, for COSC 642: Construction Information Technology, TAMU, Fall 2022.
5. Prof. Min Liu, for CE 562: Lean Construction Concepts and Methods, North Carolina State University, Fall 2020 (on-line).
6. Prof. Mardelle Shepley, for DEA 5304: Design Accountability: Evaluation of the Physical Environment, Cornell University, Fall 2020 (on-line).
7. Ms. Amreen Shajahan, for ENDS 105: Design Foundations, Fall 2019.
8. Prof. Anat Geva, for ARCH 406-502/503: Architectural Design Studio, Spring 2015, Spring 2019.
9. Prof. Phil Lewis, for COSC 681: Graduate Seminar, Fall 2018, Fall 2019.
10. Prof. Geoffrey Shen, for graduate students of Chair Professor of Construction Management, Hong Kong Polytechnic University, Hong Kong, SAR, October 19, 2018.
11. Prof. Boong Ryoo, for COSC 622: Construction Economics, TAMU, Fall 2017.
12. Prof. Zhipeng Lu, for ARCH 675: Health Design and Research, TAMU, Spring 2016.
13. Prof. Seyeon Lee, for ARCH 205: Design Studio, TAMU, Fall 2015.
14. Prof. John Bryant, for COSC 446: Specialty Capstone, TAMU, Fall 2015.
15. Prof. John Nichols, for COSC 175: Construction Graphics Communications, TAMU, Fall 2015 (7 lectures each for 2 sections, 902 and 903).
16. Prof. Alireza Borhani, for ENDS 105: Design Foundations, TAMU, Fall 2014.
17. Prof. Sarel Lavy, for COSC 622: Construction Economics, TAMU, Fall 2014, Fall 2015, Fall 2016.
18. Prof. Edelmiro Escamilla, for Camp ARCH summer program, TAMU, Summer 2014.
19. Prof. Greg Luhan, for ARCH 406: Architectural Design Studio, TAMU, Spring 2014.
20. Prof. Boong Ryoo, for COSC 475: Construction Project Planning, TAMU, Spring 2014.
21. Prof. Sarel Lavy, for COSC 489/689: Construction Best Practices (CII), TAMU, Fall 2013.
22. Prof. Göran Lindahl, for construction management, Department of Civil and Environmental Engineering, Chalmers University of Technology, Gothenburg, Sweden, Fall 2012.
23. Prof. Rodney Hill, for ARCH 458: Cultural and Ethical Considerations for Global Practice, TAMU, Fall 2012.
24. Prof. Kim Carlson, for COSC 175: Construction Graphics Communication, TAMU, Fall 2012.
25. Prof. Mark Clayton, for ARCH 205: Architectural Design I, TAMU, Fall 2012.
26. Prof. Xuemei Zhu, for ARCH 675: Health Design and Research, TAMU, Fall 2011, Fall 2012, Fall 2013, Spring 2015, Fall 2016, Fall 2019, and Fall 2022.
27. Prof. Ifte Choudhury, for COSC 489: Lean Construction, TAMU, Spring 2012.
28. Prof. Joe Horlen, for COSC 485: Construction Best Practices (CII), TAMU, Fall 2011.
29. Prof. Roger Ulrich, for COSC 675: Health Design and Research, TAMU, Spring 2011 & Fall 2010, Spring 2010.

30. Prof. Jose Fernandez-Solis, for COSC 489: Lean Construction, Spring 2011; and COSC 440 (900): Interdisciplinary capstone, TAMU, Fall 2010.
31. Prof. Geoffrey Booth, for LDEV 671: Sustainable Development, TAMU, Spring 2011.
32. Prof. Sally Morgan, for COSC 442: Commercial Capstone (902), TAMU, Spring 2011 & Fall 2010.
33. Prof. Jim Smith, for COSC 442 (901): Commercial Capstone, TAMU, Fall 2010.

CONTINUING EDUCATION: Courses Taught

1. "Incorporating AGC Case Studies into a Course or Training Event," Webinar, for the *AGC Education and Research Foundation*, with Dr. John Schaufelberger (former Dean, University of Washington), and Dr. Caroline Clevenger (Professor, University of Colorado, Denver), <Incorporating AGC Case Studies into a Course or Training Event-20240424_190737-Meeting Recording.mp4>, April 24, 2024.
2. "Interactive Session on Lean Design," Workshop facilitator, with Prof. Ganesh Devkar, for URC Construction, Chennai, India, December 2, 2023.
3. "Target Value Delivery," Workshop facilitator, *ILCC 2021 Conference workshop day* (Indian Lean Construction Conference), November 30-December 1, 2021 (US Central time, 7.5 hours; on-line presentation), CEPT University.
4. "LCI Virtual Simulation: Maroon and White," 90-minute instructional simulation for companies seeking to teach principles of Lean Construction, *Lean Construction Institute: Immersive Education Program*, April 14, 2021.
5. "LCI Virtual Simulation: Silent Squares," 90-minute instructional simulation for companies seeking to teach principles of Lean Construction, *Lean Construction Institute: Immersive Education Program*, March 17, 2021.
6. "Let's schedule the construction of a block tower!" two 75-minute scheduling simulation workshops for the *GearUp Program*, for high school students considering a career in construction, led by PI Edelmiro Escamilla, online November 17 & 18, 2020 (online)
7. "A Value Analysis of Lean Processes in Target Value Design and Integrated Project Delivery: Stakeholder Perception," *Webinar for the Evidence-Based Design Journal Club, The Center for Health Design*, with Upali Nanda and Bernita Beikmann, HKS (at 11:00 am PST/2:00 EST), 344 people logged on, April 19, 2018.
8. "Serious Games and Simulations: Transforming Culture to Enhance Building Project Delivery," *Colorado Association of Healthcare Engineers and Directors*, Steamboat Springs, CO, with co-presenter Danny Kahler, September 7 & 8, 2017.
9. "Introduction to Lean-Integrated Project Delivery," *Collaborative Global Construction Engineering Advanced Training Program for the Department of Civil Engineering at Chungbuk National University in Korea*, College Station, TX, July 4, 2017.
10. "Serious Games and Simulations: Transforming Culture to Enhance Building Project Delivery," *BC Housing*, Vancouver, Canada (with co-presenter Danny Kahler), April 18, 2017.
11. "Lean Principles and their Application to Construction," *Roofing Contractors Association of Texas (RCAT)*, Mays Business School Mini-MBA Program, College Station, TX (with co-presenter Danny Kahler), January 12, 2017.
12. "An Introduction to Lean History and Principles," **Walt Disney Imagineering**, Glendale, CA (with co-presenter Danny Kahler), August 27 & 28, 2015; October 26 & 27, 2015; and November 12 & 13, 2015.
13. "How to bring the excitement of Lean Construction gaming to the construction science classroom," offered as part of the *51st Annual International Conference for the Associated Schools of Construction*, College Station, TX, April 22, 2015, 1-5:00 pm.
14. "Lean Crash Course," Balfour-Beatty, Dallas-Fort Worth, TX (with graduate student James P. Smith), June 29, July 13 & 27, August 3, 10, 16, 17 & 18, 2012.

15. "Introduction to Lean, IPD & TVD: a 3-day workshop," *Penrose/St. Francis Health Services*, Colorado Springs, CO, with graduate students James P. Smith, Aditi Kulkarni, and Manish Munankami, April 26, 27 & 28, 2012.
16. "Thinking Lean: A workshop," *Sisters of Charity, Leavenworth Health System*, Denver, with graduate students James P. Smith and Joshua Hulum, April 26, 27 & 28, 2011.

CONTINUING EDUCATION: Participant in Academic and Industry Workshops

- *26th Annual Lean Construction Congress*, San Diego, CA, October 22-25, 2024.
- AGC Education and Research Foundation Board of Directors Annual Meeting, Charleston, SC, October 16-18, 2024.
- *AGC Annual Convention*, San Diego, CA, March 19-22, 2024.
- AGC Education and Research Foundation Board of Directors Annual Meeting, York, ME, September 11-13, 2023.
- *AGC Annual Convention + CONEXPO-CON/AGG*, Las Vegas, NV, May 13-16, 2023.
- AGC Education and Research Foundation Board of Directors Annual Meeting, Steamboat Springs, CO, September 29-October 1, 2022.
- AGC (Associated General Contractors) National Annual Convention, Grapevine, TX, March 27-31, 2022.
- NSF workshop, *Next Generation Learning-Centered Environment for Architecture, Engineering, and Construction (AEC)*, November 15-17, 2021 (virtual).
- *AGC National Convention*, Orlando, FL, September 21-24, 2021.
- *Mid-Career Learning Community (MCLC)*, led by Associate Vice President for Faculty Affairs, Dr. Heather Wilkinson, January 22 - August 20, 2021 (monthly)
- "NSF Supplementary Documents Workshop," by Dr. Laurie S. Garton, Division of Research, TAMU, November 17, 2020.
- "Writing Successful Proposals Workshop," by Dr. Laurie S. Garton, Division of Research, TAMU, October 21, 2020.
- "Transparency in Assignment Design," (COA Lunch & Learn) by TAMU's Center for Teaching Excellence, College Station, TX, November 13, 2019.
- "Drone Training," given by David Breeding, COA, College Station, TX, October 10, 2019.
- *21st Annual Lean Construction Institute (LCI) Congress*, Fort Worth, TX, October 14-18, 2019.
- *Architectural Research Centers Consortium (ARCC) 2019 conference*, Ryerson University, Toronto, Canada, May 29 to June 1, 2019.
- *National Institute of Building Sciences (NIBS)*, Building Innovation 2019 Conference & Expo: "Optimizing for Tomorrow," Washington DC, January 7-10, 2019.
- "Choosing by Advantages Workshop," January 23, 2019 and *P2SL Lean Design Forum*, Berkeley, CA, January 24 & 25, 2019.
- *Project Production Institute Annual Symposium*, San Francisco, CA, December 5-6, 2018
- *Project-Based Learning Workshop*, by TAMU's Center for Teaching Excellence and Worcester Polytechnic Institute, August 15-16, 2018.
- *Citizens University*, College Station, TX, Mondays 7-9:00 pm, January 22-April 16, 2018
- *AGC Solutions through Technology Conference*, Houston, TX, November 28, 2017.
- *Cool House Tour 2017*, Austin Energy Green Building & Solar Energy Society, Austin, TX, June 11, 2017.
- *National Institute of Standards and Technology (NIST)*, Tour, Gaithersburg, MD, March 21, 2017.
- *TRB (Transportation Research Board) Conference, 96th Annual Meeting*, Washington DC, January 7, 2017.
- *Write winning NIH grant proposals*, Research Development Services, Division of Research, Texas A&M University, College Station, TX, September 22, 2016.
- *ASC-TEXO Educators Conference & Region V Meeting*, Dallas, TX, October 6-7, 2016.

- *MEAC (Mechanical Electrical Academic Consortium) Mechanical and Electrical Faculty Boot Camp*, sponsored by MCERF and NECA, Lenexa, KS, June 3-10, 2016.
- *International Group for Lean Construction Mid-Year Meeting*, Berkeley, CA, February 1-2, 2016 (by invitation only).
- *Lean Design Forum*, Berkeley, CA, January 28-29, 2016.
- *National Institute of Building Sciences 4th Annual Conference and Expo: Building Innovation 2016*, Washington DC, January 11-15, 2016.
- *TRB (Transportation Research Board) Conference, 95th Annual Meeting*, Washington DC, January 10, 2016.
- *Transportation Camp DC 2016*, Washington DC, January 9, 2016.
- *Water-Energy-Food Resource Nexus Initiative (WEFRen) Symposium*, Texas A&M University, October 8, 2015.
- *Proposal writing for NIH (National Institutes of Health) grants*, Dr. Tillie Harris of the Grant Training Center, Texas A&M, College Station, TX, October 6, 2015.
- *Cool House Tour 2015*, Austin Energy Green Building & Solar Energy Society, Austin, TX, June 7, 2015.
- *Cyber-Physical Systems Week 2015*, The Conference Center, Seattle, WA, April 13-16, 2015.
- *Faculty Management Symposium*, Memorial Student Center, Texas A&M University, October 17, 2014.
- *2014 International Highway Engineering Exchange Program (iHEEP) Conference*, New Orleans, LA, September 28-October 2, 2014.
- *Cool House Tour 2017*, Austin, TX, June 8, 2014.
- *2014 CEC (Civil Engineering Certification) Construction Engineering Conference, "National Science Foundation Workshop: Promoting Basic Construction Research,"* Seattle, WA, March 29, 2014.
- *2013 ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Annual Conference*, Denver, CO, June 22-26, 2013.
- *Wakonse South College Teaching Conference*, Marble Falls, TX, April 5-7, 2013
- *CATEE (Clean Air Through Energy Efficiency) Conference*, Dallas, TX; presented by the Energy Systems Laboratory, Texas Energy Experiment Station and The Texas A&M University System, November 8-9, 2011.
- *Workshop for ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Standard 90.1-2010*, Dallas, TX, November 7, 2011.
- *Teaching Retreat/Workshop*, three-day workshop on teaching for tenure-track faculty, with Center for Teaching Excellence (CTE) facilitators, Bryan, TX, Aug 23-25, 2011.
- *Grant-writing Retreat/Workshop*, three-day workshop on NSF grant-writing, for tenure-track faculty, with NSF grant-writing specialists; Camp Allen, TX, Jan 5-9, 2011.
- *The National Leadership Conference for Women in Construction*, New York, NY, April 15-16, 2010.
- *Wakonse South College Teaching Conference*, Burnet, TX, April 9-11, 2010.

SERVICE

DEPARTMENTAL SERVICE

- Chair, *COSC Promotion and Tenure Committee*, fall 2024-present.
- Innovation Ideas Competition and Research Program (I2CRP) for COSC Interns Evaluation Committee, Fall 2024
- Member, *Faculty Search Committee* for COSC department head, Fall 2024
- Official faculty mentor, Dr. Julie Hartell, fall 2024-present.
- Official faculty mentor, Dr. Ashrant Aryal, fall 2024-present.
- Official faculty mentor, Dr. Zhenyu Zhang, spring 2024-present.

- Official faculty mentor, Dr. Mo Hu, fall 2023-present.
- Member, COSC *Promotion and Tenure Committee*, fall 2021 to fall 2024.
- Member, COSC GIRC Committee, fall 2019 to 2022.
- Member, *Faculty Search Committee* for new assistant professors for COSC department, Spring 2021 to Spring 2022.
- Faculty Mentor for *TAMU Lean Construction Institute Student Community of Practice*, MOU signed on November 13, 2020, achieved unrestricted status on April 13, 2021 with Filipe Hernandez, Chairperson, Lean Construction Institute Austin Community of Practice, and TAMU graduate student Founding Chairs, Yashraj Ahir, and Rajeswari Obulam. Active involvement with Austin LCI CoP activities in spring 2022.
- Member, *Strategic Planning Steering Committee*, chaired by Dr. Kunhee (KC) Choi, Fall 2019-Spring 2020
- Member, *Faculty Search Committee* for new assistant professors for COSC department, Fall 2019-Spring 2020.
- Member, *Graduate Instruction Committee*, chaired by Dr. Phil Lewis, Fall 2019-present
- *Peer Exchange: Construction Science and Management*, Texas A&M and the University of Texas at San Antonio, with Dr. Patrick Suermann and Dr. Boong Ryoo, San Antonio, TX, October 21, 2019.
- Workshops for HEB: "Introduction to Lean-IPD and Target Value Design" (session I), March 20, 2018; and "H&B: The Lean Optimization Game" (session II), April 5, 2018.
- Founder and Coordinator, *Construction Management Pre-requisite Program for Graduate Students for TAMU's COSC Department* ("Incoming graduate student boot camp"), August 17, 18, 21, 22, & 23, 2017, and shepherded its continuation on August 16, 17, 20, 21, & 22, 2018.
- Member, *Faculty Search Committee* for new assistant, associate, and full professors for COSC department, Fall 2016-Spring 2017.
- **Competition Coach**, with Boong Yeol Ryoo, *PDC Student Challenge and International Summit & Exhibition on Health Facility Planning, Design & Construction*, Sponsored by AIA/AAHF (American Institute of Architects and Academy of Architecture for Health), Orlando Florida, March 10-15, 2017, 1st place recipient, graduate student Ralph Salazar <<https://youtu.be/UzLzCQTDok>>.
- Elected by colleagues to serve on *COSC Promotion and Tenure Committee*, 2016-19.
- Served as faculty escort for departmental field trip to *Acme Brick Company*, Elgin, TX, March 4, 2016
- Member, *Graduate Committee*, Department of Construction Science, fall 2015-present.
- Served as faculty escort for departmental field trip to *NCI Group*, Houston, TX, March 27, 2015
- Served as faculty escort for departmental field trip to *Cherry Companies* (remove, recycle, return), Houston, TX, November 21, 2014
- Assisted on organization committee for the *51st Annual ASC* (Associated Schools of Construction) *Conference* to be held at Texas A&M from April 22-25, 2015
- Served as faculty escort for departmental field trip to *Heldenfels Enterprises*, Inc. (precast, pre-stressed concrete), San Marcos, TX, November 1, 2013
- Assisted with the revision of accreditation documents, *American Council for Construction Education* (ACCE), for Prof. Joe Horlen, Chair, summer-fall 2012
- Member, *Faculty Search Committee*, chaired by Dr. John Nichols, fall 2011-spring 2012
- Member, *Graduate Committee*, chaired by Dr. Sarel Lavy, fall 2010-spring 2011
- Tenure-track committee, chaired by Dr. Sarel Lavy, Dr. Jose Solis, and Dr. Boong Ryoo, sequentially, spring 2010-2011
- Initiator and Organizer, *Teaching Retreat/Workshop*, three-day workshop on teaching for tenure-track faculty, with Center for Teaching Excellence facilitators, Aug 23-25, 2011
- Member of task force to design new Construction Graphics course for departmental freshmen, fall 2010-spring 2011 (to become the core course *COSC 175: Construction Graphics Communication*)
- Initiator and Organizer, *Grant-writing Retreat/Workshop*, three-day workshop on NSF grant-writing, for tenure-track faculty, with NSF grant-writing specialists, Jan 5-9, 2011

- Initiator and Facilitator, with Dr. Julian Kang, *Case-study Writing Workshop for the Built Environment,* "one-day workshop with guest speakers, Harvard Business School case writer Mr. Harold Hogan and Assistant Dean, University of Hong Kong, Dr. Patrick Harvey, October 16, 2009
- Member of the Graduate Faculty, 2009-present.

COLLEGE / SCHOOL of ARCHITECTURE SERVICE

- Member, *Faculty Search Committee* for CoA Dean, Fall 2024 to present
- Member, Graduate Program Committee, Fall 2024 to present
- Member, Academic Affairs Committee, Fall 2024 to present
- Co-Organizer with Harold Adams Professors, 6th and 7th annual **Harold L. Adams Interdisciplinary Competition for Undergraduates (HA-ICU)**, February 3-5, 2023, and February 2-4, 2024 (Initiator for joint HA-ICU with the University of Maryland for 2023 charrette).
- **School of Architecture Strategic Plan Co-Champion**, Invited by Executive Associate Dean Shannon Van Zandt to serve on the 22-member committee to help enact the six pillars of the School of Architecture's Strategic Plan: Impact, Partnership, Recognition, Interdisciplinarity, Community, and Creativity, Spring 2023-present.
- Team Co-Lead, U.S. Department of Energy, National Renewable Energy Laboratory, **Solar Decathlon 2021-2023 Build Challenge, FINALIST with permission to proceed** (announced on April 24, 2022)
- Team Co-Lead, U.S. Department of Energy, National Renewable Energy Laboratory, *Solar Decathlon 2022 Design Challenge*
- Member, *Outstanding Alumni Selection Committee*, Spring 2022.
- Founder and organizer, *Station Zero Competition*, Interdisciplinary design competition to design sustainable 3D-printed lab facility in College Station, TX, September 9-12, 2021
(*competition website*: <https://sites.google.com/view/stationzero/home?authuser=0>;
winner's portfolio: https://lissuu.com/pooria.golestanirad/docs/final_compressed_compressed)
- Member, *Faculty Search Committee* for new assistant professors for ARCH department, Spring to Summer 2021.
- Faculty advisor for architecture PhD student Patricia Kio in TAMU *Academy for Future Faculty*, Spring 2021.
- Presenter and panelist, *Women in Science and Engineering (WISE) Faculty Advising Event*, College of Architecture, invited by PhD candidate Haleh Moghaddasi, November 19, 2020.
- Member, *College of Architecture Promotion and Tenure Committee*, Spring 2020-Spring 2024 (elected position).
- Initiated and led, 1st, 2nd, and 5th annual *Harold L. Adams Interdisciplinary Competition for Undergraduates (HA-ICU)*, February 23-25, 2018, February 22-24, 2019, February 25-27, 2022, with Harold L. Adams, Eric Bardenhagen, Rodney Hill, Carol LaFayette, and Leslie Feigenbaum; first author of *Summary Reports*, dated July 14, 2018 (1st HA-ICU), and August 23, 2019 (2nd HA-ICU).
- Judge (preliminary round), Texas Junior Academy of Science Competition, General Engineering category, October 18, 2018.
- Appointed by Dean of Architecture to serve on *Faculty Search Committee* for new Head of Dept. of Architecture, chaired by Prof. Tim McLaughlin, 2017-8.
- Appointed by Dean of Architecture to serve on *Faculty Search Committee* for new Head of Dept. of Construction Science, chaired by Prof. Elton Abbott, 2016-7.
- Member, *Search Committee* for new Director, Center for Health Systems and Design, College of Architecture, Spring 2016.
- Faculty Advisor for *SHEA (Student Health Environments Association)*, from December 1, 2014.
- Founded and facilitated *Grant-Writing Co-Coaching Group* for College of Architecture faculty. Met bi-weekly during fall 2014; approximately six attendees with 3 NSF grant proposals resulting.

- Co-facilitated *Workshop for an Institute for Human-Centered Micro-Manufacture (iHCMM)*, 14 attendees, for organizer, Dr. Francis Quek, January 18, 2014.
- Proactively initiated, negotiated, and coordinated *Grant Training Center Workshop*, with Dr. Lou Tassinary, Ms. Katy Dunn, and Department Heads, Prof. Joe Horlen, Prof. Ward Wells, Dr. Forster Ndubisi, Prof. Tim McLaughlin, presented at the College of Architecture, by Dr. Tillie Harris, CEO of the Grant Training Center, December 16-18, 2013.
- Proposal submitter, "Ideas-per-Minute/Creativity-on-Demand" Brainstorming Service, Institute for Applied Creativity, College of Architecture, Texas A&M, directed by Prof. Carol Lafayette, October 21, 2012.
- Member, Diversity Committee, College of Architecture, Texas A&M, chaired by Prof. Cecilia Giusti, Spring semester 2012.
- Faculty Fellow, Center for Health Systems and Design, College of Architecture, Texas A&M, chaired by Dr. Mardelle Shepley, 2009 to present.
- Presenter, EDAC Bootcamp: Assisted initiative to teach Evidence-Based Design in CHSD workshop to architects in healthcare facility design industry, chaired by Prof. D. Kirk Hamilton, 2009-present (multiple occasions).

UNIVERSITY SERVICE

- *President's Excellence Fund Steering Committee*, Advisory for 10-year, \$100 million program which funds T3 and X-Grant programs, by invitation from Sr. Associate Vice President for Research, Dr. Costas N. Georgiades, fall 2020-2021.
- Presenter and Panel moderator, *Women's Faculty Network*, "Tenure and Promotion Celebratory Luncheon," with WFN President, Dr. Gabriela Thornton, November 6, 2020.
- Representative/member for construction science, standing-in for Dr. Sarel Lavy, Sustainability and Environmental Management Committee (SEMC), fall semester 2018
- Reviewer, Graduate Diversity Fellowship 2018-19 applications, February 2018.
- Committee member, ACRIC (Academic Civil Rights Investigation Committee), Fall 2016-present.
- Subcommittee member, AFS (*Association of Former Students*) *Distinguished Achievement Awards*, Spring 2016.
- Participant, TAMU Interdisciplinary, University-Wide Initiative: Grand Challenge Working Session ("Educating Leaders Grand Challenge"), October 23-24, 2014.
- Faculty advisor for civil engineering PhD student Hessam Sadatsafavi in TAMU *Academy for Future Faculty*, Spring 2013.
- Participant, TAMU Interdisciplinary, University-Wide Initiative: Grand Challenge Working Session ("The Natural and Built Environment: Ensuring a Sustainable Society"), August 19-20, 2013.
- Member, *Women's Faculty Network*, Mentorship program, Texas A&M, 2011.

NATIONAL & INTERNATIONAL SERVICE AND PROFESSIONAL ACTIVITIES

- **Scientific Committee Chair**, *TRB Conference on Advancing Additive Manufacturing and Construction in Transportation* (2nd International Conference on 3D printing and Transportation), National Academy of Sciences, Beckman Center, Irvine, CA, November 7-8, 2024.
- **Steering Committee member**, *Lean in the Public Sector (LIPS)*, <<https://leaninpublicsector.org/>>, 2023-present.
- **Panelist/jury member**, Conference of the 31st *International Group for Lean Construction: Post-graduate School Summer School*, Lille, France, July 1 & 2, 2023.
- **Scientific Committee Chair**, *International Group for Lean Construction Conference-31*, Lille, France, 2022-2023.
- Steering Committee Officer, by invitation, *Lean in the Public Sector (LIPS)*, Spring 2023 to present.
- Member by invitation, **IGLC Standardization Committee**, fall 2022 to present.

- **Panelist**, IGLC Summer School, *30th International Group for Lean Construction*, University of Alberta, Edmonton, Canada, July 29-31, 2022.
- Juror by invitation, **LCI Design Award Committee**, Summer 2022.
- **Session moderator**, IGLC-30 (30th International Group for Lean Construction Conference), Edmonton, Canada, July 27-29, 2022.
- **Session moderator**, 9th ICCEPM (International Conference on Construction Engineering and Project Management), Las Vegas, NV, June 20-23, 2022, for Lean Design and Construction session held on June 21, 2022.
- **AGC Education and Research Foundation Board of Directors**, Official start: March 2020 (2019 soft start) to present. Evaluator of applications for: AGC Case Study Committee, Outstanding Educator Award Committee, Scholarship Committees (both academic and work force), and Long-Range/Strategic Planning Oversight Committee. 3-year term renewed in 2023.
- **Founder and Organizing Chair**, "Administering and Playing Lean Simulations On-Line (APLSO)" March 30, 2020 to present, This international group meets for 90 minutes the first Monday of every month to develop and test new lean simulations.
- Scientific Committee, Planning committee member for the *2nd International Conference on 3D printing and Transportation*, National Academy of Sciences, fall 2020 to present.
- Summer School Faculty, *29th International Group for Lean Construction*, Lima, Peru, July 17, 2021 (Virtual)
- **Scientific Committee**, *1st International Conference on 3D printing and Transportation*, National Academy of Sciences, Washington DC, November 20-21, 2019.
- **Scientific Committee**, "Buildings, Cities, and Performance:" *4th International Symposium of the PhD Program at IIT College of Architecture in collaboration with the Architectural Research Centers Consortium (ARCC)*, Nov. 15-17, 2019.
- Representative of TAMU COSC program officers, "Summit Among Peers," University of Denver, June 14-15, 2018.
- Academic Advisor, **Construction Industry Institute (CII) Advisory Council Facilities and Healthcare Sector Committee**, October 24, 2016 until June 21, 2018; includes advisory trips to CII meetings on August 1-4, 2016 (Annual Mtg., National Harbor, Washington DC); January 31-February 1, 2017 (Planning/Leadership, Austin, TX); April 12-13, 2017 (Spring Mtg., Orlando, FL); July 31-August 2, 2017 (Annual Mtg., Orlando, FL); and October 24-25, 2017 (Fall Mtg., Austin, TX)
- Reviewer, Department of Civil and Architectural Engineering and Construction Management, College of Engineering and Applied Science, University of Cincinnati
- Director of International Development, *Korea Institute of Ecological Architecture and Environment (KIEAE)*; Jan 2017-Dec 2018 (appointed, 2-year term).
- Dean, Summer School, *24th International Group for Lean Construction*, Boston, MA, July 23-24, 2016.
- Research advisor/host at Texas A&M to doctoral student and Chinese government scholarship recipient, Shen Liang-Fa, Tongji University, School of Economics and Management, Shanghai, China, for his PhD research, from October 20, 2015 to present.
- Research advisor/host at Texas A&M to Brazilian graduate student and government research scholarship recipient, Carolina Asensio Oliva, University of Campinas, for her research: "Proposal for the integration of Target Value Design into the Design process" from September 19, 2013 to November 8, 2013.
- Panelist/jury member, 19th conference of the *International Group for Lean Construction: Post-graduate School Summer School*, Lima Peru, July 17 & 18, 2011.

COMMUNITY SERVICE

- Volunteer, *Aggieland Humane Society*, Assisted Girls School Troop 9554 with the construction of canine adoption meet-and-greet areas, September 28, 2019.
- Volunteer, *Habitat for Humanity Women's Build*, September 10, 2011.

MEMBERSHIPS and CERIFICATIONS

- Associate member, ASCE (*American Society of Civil Engineers*, member #493329), 2014 to present.
- Associate member, ASHRAE (*American Society of Heating, Refrigerating and Air-Conditioning Engineers*, member # 8230490), July 1, 2013 to June 30, 2014.
- Accredited Professional, LEED AP (*Leadership in Energy & Environmental Design*, accreditation #10428878) since June 4, 2009; Building Design + Construction (BD+C): renewed after completing 30 continuing education credits on October 2, 2013; issued by the Green Building Certification Institute (GBCI). Currently: Legacy.
- Academic member, LCI (*Lean Construction Institute*, member previously #911 (2009), #12597 (2019), #17303, 2017-present.
- Member, NIBS (*National Institute of Building Science*, member # 42163062), September 2, 2016-2017.
- Member, NAWIC (*National Association of Women in Construction*, member #63742), November 1, 2014-2015.

SYNERGISTIC ACTIVITIES

- **Founder and Chair**, *Administering and Playing Lean Simulations On-Line* (APLSO), (includes 95 members and 30 universities across the globe who develop collaborative on-line lean simulations), March 30, 2020 to present.
- Faculty Affiliate, *Mays Innovation Research Center*, Academic year 2020-2021, by invitation from Center Director Dr. Korok Ray.
- *Autodesk Boston Build Space*, Construction of large, modular, Styrofoam arch, robotically hot-wire cut; with build team PI Amir Behzadan, and co-PIs Alireza Borhani, Negar Kalantar, Julian Kang, and graduate student Neeraj Yadav, and undergraduate William Palmer, May 27-June 30, 2018. See “Minimum waste interlocking vault structures” <<https://www.youtube.com/watch?v=T2JAQTKwloo>>
- *Mega-Manufacturing Idea Lab*, September 29-30, 2017, La Torretta, Houston, TX: interdisciplinary, trans-university collaborative event to envision technological possibilities to address future needs of the AEC industry; Director, Bjorn Birgisson.
- *Fellow of Institute for Applied Creativity*, Texas A&M; combines experimental, rational, intuitive, and analytical methods to realize tangible accomplishments in academic, private, and civic arenas; Director, Carol LaFayette, since 2013.
- *Fellow of Center for Health Systems and Design*, Texas A&M; invited to educate industry representatives in the financial implications of Evidence-Based Design and lean construction at the Texas A&M Evidence-Based Design Boot Camp for Healthcare facility owners and design professionals, 2009-2010; with Director, Mardelle Shepley
- *Coach for Engineering-in-Training (EIT) licensing examination* in Life Cycle Cost Analysis (engineering economics) and Engineering Ethics, 2005-2009
- *Advisor and co-author for Evidence-Based Design Certification (EDAC) examination*; Center for Health Design, Concord, CA (2007). Contributed content to the official EDAC examination study guide, 2008-2009: *Integrating Evidence-Based Design: Practicing the Healthcare Design Process*. See “Book, contributing co-author.”