

The University of Arizona | CAPLA | School of Architecture

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CHRONOLOGY OF EDUCATION and PROFESSIONAL CREDENTIALS

EDUCATION

- 1991 - 1993 **University of Pennsylvania**, Philadelphia, PA
Master of Architecture; Thesis: *Principles, Poetry and Techniques of Wooden Boat Building | a Floating Theater*, Chair: Robert Marino
- 1992 **Paris Program, University of Pennsylvania, GSFA**
Summer Study Abroad Program
- 1987 - 1991 **University of Illinois**, Urbana-Champaign, IL
Bachelor of Science and Architectural Studies
- 1989 - 1990 **Ecole d'Architecture et Urbanisme**, Versailles, France
University of Illinois Study Abroad Program, one academic-year

PROFESSIONAL CREDENTIALS

- 2015 - present **National Council of Architectural Registration Boards** (NCARB), record no: 87968 (application pending)
- 2009 - present **LEED Accredited Professional**, GBCI LEED AP no: 0010262076
- 2000 - present **Licensed Architect Arizona**, seal no: 35373
Through qualifying education, experience and reciprocity
- 1995 - 2007 **Licensed Architect Illinois**, seal no: 001-015907
Through qualifying education, experience and successful completion of the Architectural Registration Examination (ARE: written and graphic examination)

CHRONOLOGY OF ACADEMIC EMPLOYMENT

- 2010 - present **School of Architecture, CAPLA, University of Arizona**, Tucson, AZ
Assistant Professor
- 2004 - 2010 **School of Architecture, CAPLA, University of Arizona**, Tucson, AZ
Lecturer
- 1999 - 2004 **School of Architecture, CAPLA, University of Arizona**, Tucson, AZ
Assistant Professor
- 1998 - 1999 **Hammons School of Architecture, Drury University of Arizona**, Springfield, MO
Visiting Assistant Professor

CHRONOLOGY OF PROFESSIONAL EMPLOYMENT

- 2005 - present **Folan Trumble Architects**, Tucson, AZ + Pittsburgh, PA
Principal
- 1999 **Alkis Tsolakis Architect**, Springfield, MO
Project Architect
- 1997 - 1998 **Gerner Kronick + Valcarcel Architects**, NYC, NY
Project Architect
- 1996 - 1997 **Point B Design**, NYC, NY
Project Architect
- 1995 - 1996 **Chateau de Vernoux**, Le Louroux Beconnais, France
Staff Architect and Design-Build Crew Leader
- 1995 - present **Chris Trumble Architect**, NYC, NY + Tucson, AZ
Principal

1993 - 1995	Siris-Coombs Architects , NYC, NY Job-Captain
1991 - 1993	Turner Architectural Associates Inc. , Kankakee, IL Architectural Intern
1989 - 1990	Johnston Hultsch Architects , Kankakee, IL Architectural Intern

HONORS and AWARDS

2015	<p>AIA Arizona Distinguished Building Award (level to be announced 10.03.15) <i>double-blind peer-reviewed</i></p> <p>Project: Arizona's Children Association (AzCA) Playground This award by the <i>American Institute of Architects Arizona</i>, recognizes excellence in design, planning, and construction of projects located anywhere in the world that are designed by AIA Arizona architects registered and licensed in the State of Arizona and honors the highest standards of design in response to user requirements, site, context, climate, and environment.</p>
2015	<p>AIA Arizona Unbuilt Design Award (level to be announced 10.03.15) <i>double-blind peer-reviewed</i></p> <p>Project: Ross Creek Centre for the Arts Dining Hall This award by the <i>American Institute of Architects Arizona</i>, recognizes achievement in architectural design for commissioned projects that may or may not be built.</p>
2015	<p>ACSA Design Build Award <i>double-blind peer-reviewed</i></p> <p>Project: Homo Ludens Homo Faber (AzCA Playground) This award by the <i>Association of Collegiate Schools of Architecture</i> honors the best practices in school-based design-build projects. It recognizes projects that demonstrate how faculty, students, and schools work to realize design-build projects. Curricula based design-build projects can encompass a variety of endeavors, scope, scale and setting, but at their core they present constructions that illustrate design learning outcomes from conception to tangible fruition.</p>
2014	<p>AIA Arizona Distinguished Building Citation Award <i>double-blind peer-reviewed</i></p> <p>Project: Sonoran Shelters Marana Civic Center This award by the <i>American Institute of Architects Arizona</i>, recognizes excellence in design, planning, and construction of projects located anywhere in the world that are designed by AIA Arizona architects registered and licensed in the State of Arizona and honors the highest standards of design in response to user requirements, site, context, climate, and environment.</p>
2014	<p>AIA Southern Arizona Distinguished Building Merit Award <i>double-blind peer-reviewed</i></p> <p>Project: Arizona's Children Association (AzCA) Playground This award by the <i>American Institute of Architects, Southern Arizona Chapter</i>, recognizes excellence in design, planning, and construction of projects located anywhere in the world that are designed by <i>AIA Southern Arizona</i> architects registered and licensed in the State of Arizona and honors the highest standards of design in response to user requirements, site, context, climate, and environment.</p>
2014	<p>AIA Southern Arizona Distinguished Building Citation Award <i>double-blind peer-reviewed</i></p> <p>Project: Sonoran Shelters Marana Civic Center [description as previous]</p>
2014	<p>Arid City Synergy Design Competition 2014, AIA <i>double-blind peer-reviewed</i> Third Place, served as professional team lead with recent graduates Christopher Maltez and Prabjeet Matharoo.</p>
2013	<p>AIA Arizona 2013 Educator Award <i>single-blind peer-reviewed</i> This award by the <i>American Institute of Architects Arizona</i>, recognizes the fundamental importance of education in advancing the art and science of design, thus improving the quality of our environment. Further, AIA Arizona is vitally interested in education and lends its full support to public and private schools as they seek to achieve and maintain excellence in architecture and architectural education. AIA Arizona wishes to make this interest tangible by honoring the significant achievements of individuals and academic programs.</p>

- 2013 **Robert Giebner Commendation for Teaching**
School of Architecture, CAPLA, University of Arizona
 In honor of the late Robert Giebner, former professor and Dean, is determined by vote of all Architecture students. Recognizing architecture faculty of excellence in the art of teaching, particularly for developing potential and expanding horizons. Students are asked to consider: enthusiasm, knowledge and love of the subject matter, preparation and organization, clarity of presentation, stimulation of interest and thinking, course content, and interaction and rapport with students.
- 2012 **Robert Giebner Commendation for Teaching**
 School of Architecture, CAPLA, University of Arizona
- 2011 **Invited Visiting Researcher**
 Centre for Architectural Structures and Technology (C.A.S.T.)
 Faculty of Architecture, University of Manitoba, Winnipeg, MB [May 29 – June 11]
- 2011 **Robert Giebner Commendation for Teaching**
 School of Architecture, CAPLA, University of Arizona
- 2010 **ACEC Engineering Excellence Award**
Project: Rose Neighborhood Pedestrian Bridge
 Awarded to Structural Grace, Inc. by the *American Council of Engineering Companies of Arizona*. Project was designed by architects and faculty members Chris Trumble, Dale Clifford and students Ryan Meeks, Douglas Weibel.
- 2002 **Outstanding Teaching Award**
 College of Architecture, Planning and Landscape Architecture, University of Arizona
- 2002 **Robert Giebner Commendation for Teaching**
 School of Architecture, CAPLA, University of Arizona
- 1993 **Bockius Scholarship**
 University of Pennsylvania
- 1991 **ALKO Lighting Design Award for Excellence**
 University Illinois Urbana-Champaign
- 1990 **Pella Prize**
 University Illinois Urbana-Champaign
- 1989 - 1990 **Student Coordinator**, elected by peers
 Ecole d'Architecture et Urbanisme, University of Illinois Study Abroad Program

SERVICE and OUTREACH

NATIONAL / INTERNATIONAL

- 2014 **Journal of Architecture and Planning, King Saud University KSU-A&P**
 Paper Reviewer
- 2013 - present **Design Build Exchange**
 An international collaboration and initiative to facilitate the exchange of information, knowledge, and practices critical to educational design build endeavors in North America.
 Director: 2013-14, Member: 2013-present.

LOCAL / STATE

- 2014 - 2015 **Sustainability Laboratory and Urban Garden, Tucson AZ**
 Project programming, design and construction for *City High School* and the *Paulo Freire Freedom School*. Delivered through arc451a 2014, independent studies and volunteers; in collaboration with Linda Samuels
- 2011 - 2012 **AzCA Playground, Tucson AZ**
 Project programming, design and construction for the *Arizona's Children Association*. Delivered through arc451 2011, independent studies and volunteers.
- 2011 - 2012 **Bus Shelter Prototypes, Tucson AZ**
 Programming, design and construction of four bus shelters for the *City of Tucson*. Delivered through arc451 2010, independent studies and volunteers.

- 2011 - 2012 **AzCA Playground, Tucson AZ**
Project programming, design and construction for the *Arizona's Children Association*. Delivered through arc451 2011, independent studies and volunteers.
- 2011 - 2012 **Bus Shelter Prototypes, Tucson AZ**
Programming, design and construction of four bus shelters for the *City of Tucson*. Delivered through arc451 2010, independent studies and volunteers.

COLLEGE

- 2015 - present **CAPLA West Face**
Programming, design and construction of project to develop the CAPLA West forecourt with a pavilion and integrated landscape. Delivered through arc451a and arc451b 2015.
- 2013 - 2015 **CAPLA Dean's Faculty Advisory Committee**, Appointed
- 2012 **Interstitial Installation**
Programming, design and construction of a furniture installation on two floors in the area between CAPLA East and CAPLA West. Delivered through arc402 2012.
- 2010 - 2011 **CAPLA Wind Tunnel**
Programming, design and construction of a 32' long contraction-less wind tunnel. In collaboration with Dr. Nader Chalfoun and students David Koenst and Andre Rodrigue.

DEPARTMENTAL

- 2015 - 2016 Faculty Search Committee for Assistant Professor Position in Design Build, Chair, appointed
- 2015 - 2016 School of Architecture Strategic Plan Committee, Chair, appointed
- 2014 - 2015 Faculty Search Committee for Assistant Professor Position in Design Build, member appointed
- 2013 - present Association of Collegiate Schools of Architecture Faculty Councilor, Appointed
- 2013 - 2014 Task Force on Awards and Exhibits, Appointed
- 2011 - 2012 Curriculum Committee; Graduate / Undergraduate, Vice-chair, Elected
Building Technology Stream Coordinator
- 2011 - 2012 Adjunct Faculty Mentor; Jean-Luc Cuisinier, Ian Reagan and Liam Frederick, Appointed
- 2011 - 2012 Fabrication Safety Task Force, Appointed
- 2010 - 2011 Curriculum Committee; Graduate / Undergraduate, Co-chair, Elected
Building Technology Stream Coordinator
- 2010 - 2011 Material Labs Liaison, Appointed

MEMBERSHIPS and PROFESSIONAL AFFILIATIONS

- 2014 - present American Institute of Architects, Southern Arizona Chapter, Member
- 2014 - present Sustainable City Project, Faculty Affiliate
- 2013 - present Building Technology Educator's Society, Member
- 2010 - present Association of Collegiate Schools of Architecture, Member
- 2010 - present Drachman Institute, Faculty Affiliate

PUBLICATIONS

DOUBLE-BLIND PEER-REVIEWED ARTICLES, SELECTED BY FULL PAPER

- 2014 Trumble, C. "An Introductory Pedagogy of Sustainable Structures for Architecture Students," The 2014 Sustainable Structures Symposium, Conference Proceedings, 297-308.
- 2014 Trumble, C. "Bus Shelter Prototypes in the Sonoran Desert," *Journal of Architecture and Planning*, King Saud University (KSU-A&P), Volume 26, Issue 2, July 2014. Issue on "Energy at the Intersection between Design and Building Science in Hot Arid Regions," 29-41.

- 2011 Trumble, C. "Empirical Exercise in Structural Design: Force, Form, Material and Connection," The Sixth International Structural Engineering and Construction Conference, *Modern Methods and Advances in Structural Engineering and Construction*, Conference Proceedings, 143-148.

DOUBLE-BLIND PEER-REVIEWED ARTICLES, SELECTED BY ABSTRACT

- 2014 Gjertson, W. G. and Trumble, C. "Design Build Gone South," The 2014 Association of Collegiate Schools of Architecture Fall Conference, *Working Out | Thinking While Building*, Conference Proceedings, 194-200, 50% co-author.
- 2013 Trumble, C. "Nature of Structure," The 2013 National Conference on the Beginning Design Student, NCBDS 29, *Actions: Making of Place*, Conference Proceedings, 553-558.
- 2013 Trumble, C. "Geometry Material and Ergonomics," The 2013 National Conference on the Beginning Design Student, NCBDS 29, *Actions: Making of Place*, Conference Proceedings, 559-564.
- 2012 Trumble, C. "Deformation Reformation," The 2012 National Conference on the Beginning Design Student, NCBDS 28, *End of the Beginning*, Conference Proceedings, 379-384.
- 2012 Trumble, C. "Block Lofting," The 2012 National Conference on the Beginning Design Student, NCBDS 28, *End of the Beginning*, Conference Proceedings, 373-378.

DOUBLE-BLIND PEER-REVIEWED PROJECTS/POSTERS

- 2014 Trumble, C. "Wood Cantilevers," The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Materials*, Project Proceedings, 36-37.
- 2014 Trumble, C. "Interstitial Installation | Site Specific Furniture as an Architectural Microcosm," The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Architecture in an Expanded Field from Interiors to Landscape*, Project Proceedings, 6-7.
- 2014 Trumble, C. "What's in a Bus Shelter," The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Urbanism*, Project Proceedings, 50-51.
- 2014 Trumble, C. "Research + Application | Bus Shelter Prototypes for the Sonoran Desert," The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Design Research in the Studio Context*, Project Proceedings, 20-21.

PUBLICATIONS BY OTHERS ABOUT WORK AFFILIATED WITH COLLEGE

- 2015 The Arizona Forum (AzF4), spring 2015, a semi-annual peer reviewed journal (print) of the American Institute of Architects Arizona and AIA Phoenix Metro. This issue features an article by Liz Farakas on the "Sonoran Shelters" project (Trumble, C.), 42-47. It also features an article by Mathew Salenger on the winners of the Arid City Synergy Competition including third place "symbio-CITY" (Maltez C., Matharoo P., Trumble C.), 69-73.
- 2015 Arizona Daily Star newspaper feature recognizing AIA Southern Arizona's award winning design projects including the "AzCA Playground," Merit Award (Trumble C.) and "Sonoran Shelters," Citation (Trumble C.), 03.10.15.
- 2014 KOLD news feature by Maria Hechanova on the "Sustainability Laboratory and Urban Garden Project" (Samuels S., Trumble C.) broadcast and published online, 12.10.2014, <http://www.tucsonnewsnow.com/story/27593498/downtown-alley-gets-makeover>
- 2012 University of Arizona news feature by Alexis Blue on the "Sonoran Shelters" projects (Trumble C.), 10.24.12, <http://uanews.org/blog/studentbuilt-bus-shelters-offer-shade-water-harvesting>
- 2012 University of Arizona web feature and video by Laura Markowitz titled "Architecture at Play" on the "AzCA Playground" (Trumble C.), 05.30.12, <http://www.arizona.edu/architecture-play>

CITATION

- 2007 “Heuristic Formations: Design as Empirical Making,” Ryan Smith, 180, *Design Studio Pedagogy* edited by Ashraf Salama and Nicholas Wilkinson, 2007, The Urban International Press ISBN: 1-872811-09-04.

EXHIBITS

- 2015 “Pedestrian Tracings,” a permanent public art project for the El-Paso Gas line Multi-use Pathway Project, Tempe AZ. Completion scheduled for July, 2015.
- 2014 - 2015 AIA Arizona 2014 Design Awards Exhibit; travels to various venues throughout Arizona featuring award winning projects including the “Sonoran Shelters” project (Trumble C.).
- 2011 AIA Southern Arizona Home Tour featured “2335” a modern renovation of a 4500sf historic residence by Folan Trumble Architects.
- 2002 Pentagon Memorial Competition, National Building Museum, Washington D.C.. Submitted entry was one of 75 submissions, selected from a pool of 4000, exhibited October 30th – November 9th 2002. In collaboration with John Folan.
- 2000 Robert Le Ricolais “Visions & Paradox” National curator: Peter McCleary, CALA University of Arizona 2000: served as venue curator, exhibit and publication designer.

CONFERENCES and SCHOLARLY PRESENTATIONS

INVITED LECTURES

- 2014 - 2015 “The Structure of Tall Buildings,” arc302 Design Studio 4 | Tectonics, University of Arizona, guest lecture.
- 2014 Featured Speaker / Panelist (with Bob Vint) on Architect Antonio Gaudi and the screening of *Sagrada: The Mysteries of Creation*, Loft Cinema, Tucson, AZ, September 24th, 2014.
- 2012 - 2014 “Critical Practice | Design as Hypothesis,” arc597a Research Methods Graduate Seminar, University of Arizona, guest lecture.
- 2012 “Academic Design Build | Version 2.0,” AIA Western Mountain Region (WMR) Annual Conference, Tucson AZ. In collaboration with Mary Hardin and Rob Miller.
- 2011 “Performative Shelter: Design Values and Environmental Performance,” Architecture Week, Southern Arizona Chapter of the American Institute of Architects, Tucson AZ, public lecture.
- 2011 “Regionally Specific Bus Shelters: University of Arizona Design Build,” Regional Transportation Authority, Pima County AZ, guest lecture.

CONFERENCE PRESENTATIONS

- 2015 “Homo Ludens | Homo Faber,” The 103rd Association of Collegiate Schools of Architecture Annual Meeting, *The Expanding Periphery and the Migrating Center*, Toronto ON, Canada.
- 2014 “Design Build Gone South,” The 2014 Association of Collegiate Schools of Architecture Fall Conference, *Working Out | Thinking While Building*, Halifax NS, Canada. Joint presentation with co-author W. Geoff Gjertson.
- 2014 “An Introductory Pedagogy of Sustainable Structures for Architecture Students,” The 2014 Sustainable Structures Symposium, Portland State University, Portland OR.
- 2014 “Wood Cantilevers,” The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Materials*, Miami FL.
- 2014 “Interstitial Installation | Site Specific Furniture as an Architectural Microcosm,” The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Architecture in an Expanded Field from Interiors to Landscape*, Miami FL.
- 2014 “What’s in a Bus Shelter,” The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Urbanism*, Miami FL.

- 2014 “Research + Application | Bus Shelter Prototypes for the Sonoran Desert,” The 102nd Association of Collegiate Schools of Architecture Annual Meeting, *Globalizing Architecture | Flows and Disruptions: Design Research in the Studio Context*, Miami FL.
- 2013 “Nature of Structure,” The 2013 National Conference on the Beginning Design Student, NCBDS 29, *Actions: Making of Place*, Temple University, Philadelphia PA.
- 2013 “Geometry Material and Ergonomics,” The 2013 National Conference on the Beginning Design Student, NCBDS 29, *Actions: Making of Place*, Temple University, Philadelphia PA.
- 2012 “Deformation Reformation,” The 2012 National Conference on the Beginning Design Student, NCBDS 28, *End of the Beginning*, Pennsylvania State University, State College PA.
- 2012 “Block Lofting,” The 2012 National Conference on the Beginning Design Student, NCBDS 28, *End of the Beginning*, Pennsylvania State University, State College PA.
- 2012 “An American Playground,” The Third International Conference on the Constructed Environment, Vancouver BC, Canada.
- 2011 “Cultivating Social and Technical Responsibility in the Academy: Regionally Specific Bus Shelters,” The Second International Conference on the Constructed Environment, Chicago IL.
- 2011 “Empirical Exercise in Structural Design: Force, Form, Material and Connection,” The Sixth International Structural Engineering and Construction Conference, *Modern Methods and Advances in Structural Engineering and Construction*, Zurich Switzerland.

SPECIAL FOCUS PRESENTATIONS + SESSIONS

- 2014 “design build Exchange” (dbX) special focus session at the 2014 Association of Collegiate Schools of Architecture Fall Conference, *Working Out | Thinking While Building*, Halifax NS, Canada. As the director of the dbX, Chris Trumble developed and delivered the presentation outlining the developments and status of research initiative. The accompanying working session was facilitated by dbX member Stephen Verderber.
- 2014 “design build Exchange” (dbX) special focus session at the 102nd Association of Collegiate Schools of Architecture Annual Meeting, Miami FL. As the director of the dbX, Chris Trumble developed and delivered the presentation launching the research initiative. The session was hosted by dbX principal Ted Cavanagh.

GRANTS and FUNDED PROJECTS

- 2015 - 2017 Developing a Sustainable Material and Structure for Food Storage and Climate Change Adaptation in Arid Lands; Collaborator with Dr. David Stone and Dr. Casey Kahn-Thornbrugh, Co-PDs, Tohono O’odham Community College, and Dr. Supapan Seraphin, Collaborator, University of Arizona
Funding: \$200,000 provided by the *United States Department of Agriculture (USDA)*
- 2015 - 2016 CAPLA West Face Project, Tucson AZ; Project PI 100%.
Funding: \$31,984 (\$40,000 CAD, based on exchange rate 06.30.15) provided by the *Thinking While Doing* grant sponsored by the *Social Sciences and Humanities Research Council* of Canada. *contract in process
- 2014 - 2015 Sustainability Laboratory and Urban Garden, Tucson AZ; Project PI 100%.
Total Funding: \$49,100; \$14,000 provided by *City High School* and the *Paulo Freire Freedom School*, \$35,100 provided by the “Urban Activation Through Sustainable Stewardship” (UATSS) grant sponsored by the *University of Arizona Green Fund*. Linda Samuels is the sole Principal Investigator for the UATSS Grant, Chris Trumble is a collaborator.
- 2014 Ross Creek Centre for the Arts, Canning NS, Canada; Project PI 100%.
Funding: \$1500 provided by the *Thinking While Doing* grant sponsored by the *Social Sciences and Humanities Research Council* of Canada.

- 2013 - 2019 Thinking While Doing (TWD) grant; co-applicant
Funding: \$2.49 million CAD provided by the *Social Sciences and Humanities Research Council* of Canada.
University of Arizona annual contracts: 50% co-PI, 50% co-PI Robert Miller
2014-15 contract: \$21,860 (\$27,338 CAD)
2015-16 contract: \$43,771(\$54,741 CAD) *contract in process
- 2013 - 2015 Public Art Grant for the El Paso Gas Line Multi-use Pathway Project Tempe, AZ; Project PI 100%.
Funding: \$36,400 provided by the *Tempe Municipal Arts Commission*.
- 2012 Interstitial Installation, CAPLA, University of Arizona, Tucson AZ; Project PI 100%.
Funding: \$6,000 provided by the School of Architecture.
- 2011 - 2012 Marana Civic Center Bus Shelters, Marana AZ; Project PI 100%.
Funding: \$69,984 provided by the Town of Marana.
- 2011 - 2012 Arizona's Children Association Playground, South Tucson AZ; Project PI 100%.
Funding: \$59,535; \$45,535 provided *Communities Putting Prevention to Work* grant awarded to the *Pima County Health Department* by the *US Department of Health and Human Services*, \$7000 provided by Jeff Kozak, and \$7000 provided the School of Architecture, University of Arizona.
- 2010 - 2011 Bus Shelter Prototypes, Tucson AZ; Project PI 100%.
Funding: \$23,000; \$20,000 provided *Communities Putting Prevention to Work* grant awarded to the *Pima County Health Department* by the *US Department of Health and Human Services*, \$3000 provided by the Drachman Institute.

RECOGNITION OF COLLABORATORS ON GRANTS and PUBLICATIONS

- 2015 - 2017 Dr. David Stone, *Tohono O'odham Community College*, 50% Co-PI; Dr. Casey Kahn-Thornbrugh, *Tohono O'odham Community College*, 50% Co-PI; Dr. Supapan Seraphin, *University of Arizona*; Collaborator on "Developing a Sustainable Material and Structure for Food Storage and Climate Change Adaptation in Arid Lands" grant sponsored by the *United States Department of Agriculture* (USDA)
- 2014 W. Geoff Gjertson, Professor, *University of Louisiana Lafayette*; 50% co-author on "Design Build Gone South" paper, 2014 ASCA Fall Conference Proceedings
- 2014 Linda Samuels, Director, Sustainable City Project, University of Arizona; "Urban Activation Through Sustainable Stewardship" (UATSS) grant sponsored by the *University of Arizona Green Fund*. Linda Samuels is the 100% Principal Investigator for the UATSS Grant, Chris Trumble is a collaborator.
- 2013 - 2019 Thinking While Doing (TWD) grant sponsored by the *Social Sciences and Humanities Research Council* of Canada. This international multi-university grant includes partner institutions, co-applicants and collaborators from several universities. The grant principal is Ted Cavanagh, Professor, Dalhousie University. I have been unable to acquire a current comprehensive list defining all participants and their respective / relative distributions of effort regarding the greater TWD grant. The grant is comprised of three working groups, I am a member of two; the design build exchange (dbX) and the design build Group (dbG). I am one of five collaborators on the dbX; with Ted Cavanagh, Professor, *Dalhousie University*; W. Geoff Gjertson, Professor, *University of Louisiana Lafayette*; Patrick Harrop, Associate Professor, *University of Manitoba*; Greg Snyder, Associate Professor, *University of North Carolina Charlotte*, Stephen Verderber, Professor, *University of Toronto*. I am one of four partners of the dbG; with Ted Cavanagh, Professor, *Dalhousie University*; W. Geoff Gjertson, Professor, *University of Louisiana Lafayette*; Greg Snyder, Associate Professor, *University of North Carolina Charlotte*. Collaborators on the dbG include Robert Miller, Director / Professor, *University of Arizona* and Chris Jarret, Director / Professor, *University of North Carolina Charlotte*.

INFORMATION ON TEACHING and ADVISING | RECENT

EXTENT OF TEACHING

2015	FALL		
	arc451b/510f Design Studio 7 Application 2	Enrollment: 16	Credits: 6
	arc221 Building Technology 1 Structures 1	Enrollment: 50	Credits: 3
	SPRING		
	arc451a Design Studio 6 Application 1	Enrollment: 11	Credits: 6
	arc322 Building Technology 4 Structures 2	Enrollment: 55	Credits: 3
2014		Enrollment: 7	Credits: 3 avg
	FALL		
	arc451b Design Studio 7 Application 2	Enrollment: 13	Credits: 6
	arc221 Building Technology 1 Structures 1	Enrollment: 53	Credits: 3
	SPRING		
	arc451a Design Studio 6 Application 1	Enrollment: 11	Credits: 6
2013		Enrollment: 64	Credits: 3
	FALL		
	arc221 Building Technology 1 Structures 1	Enrollment: 65	Credits: 3
	SPRING		
	arc402 Design Studio 6 Application 1	Enrollment: 13	Credits: 6
	arc322 Building Technology 4 Structures 2	Enrollment: 60	Credits: 3
2012	FALL		
	arc461/561f Nature of Structure	Enrollment: 13	Credits: 3
	arc221 Building Technology 1 Structures 1	Enrollment: 67	Credits: 3
	SPRING		
	arc402 Design Studio 6 Application	Enrollment: 11	Credits: 6
	arc322 Building Technology 4 Structures 2	Enrollment: 50	Credits: 3
2011		Enrollment: 10	Credits: 2.9 avg
	FALL		
	arc451 Design Studio 7 Research	Enrollment: 19	Credits: 6
	arc221 Building Technology 1 Structures 1	Enrollment: 61	Credits: 3
	SPRING		
	arc452 Design Studio 8 Capstone	Enrollment: 13	Credits: 6
2010		Enrollment: 56	Credits: 3
	arc322 Building Technology 4 Structures 2	Enrollment: 2	Credits: 2 avg
	arc299 Ind Study	Enrollment: 1	Credits: 1
	arc399 Ind Study	Enrollment: 13	Credits: 2.5 avg
	arc499 Ind Study		
	FALL		
	arc451 Design Studio 7 Research	Enrollment: 15	Credits: 6
	arc221 Building Technology 1 Structures 1	Enrollment: 59	Credits: 3
	arc499 Capstone Prep	Enrollment: 13	Credits: 1

INDIVIDUAL STUDENT CONTACT

COLLABORATIONS WITH STUDENTS ON RESEARCH PROJECTS

- 2015 “CAPLA West Face” is a grant funded educational design build / research project. Studio participants were collaborators: Mahmood Al Musawi, Tareq Alzawawi, Ed Bilek, Drew Cook, Trevor Cordivari, Ali Dowd, Antoinette Escobar, Ben Gallegos, Christina Kukurba, Prabhs Matharoo, Alex Mayer, Jessica McQuillen, Kevin Murney, Thong Phan, Edson Pinto, Katie Roch, Kevin Reid, Will Ruoff, Ryan Stucka, Quan Trang; Dan Maher Teaching Assistant, Gabby Jehle Research Assistant
- 2014 - 2015 “Sustainability Laboratory and Urban Garden” is an educational design build / research project. Studio participants were collaborators: Dulce Arambula, Dengjie Chen, Andrew Cusick, Peng Gao, Ryan Haines, Nikota Litzin, Dailong Ma, Joseph Miranda, Jordan Pascua, Crosbie Roper, Mekael Wesley-Rosa, Michael Vo; Dan Maher Teaching Assistant, Gina Trautner Research Assistant.
- 2014 “Ross Creek Centre for the Arts Dining Hall” is an educational design build / research project recognized with one double-blind peer-reviewed award. Studio participants were collaborators: Erica Blank, Joe DeBenny, Peng Gao, Ryan Haines, Claudia Hapenciuc, Michelle Leonard, Nikota Litzin, Dailong Ma, Stephanie Oleksa, Miriam Strauss, Michael Vo.
- 2014 design build Exchange; hired student Alex Mayer as a research assistant.
- 2013 - 2014 “Pedestrian Tracings” public art project for the El Paso Gas Line Multi-use Pathway; hired student Ben Thiltges as an assistant.
- 2011 - 2012 “Sonoran Shelters” project; hired students David Koenst and Kevin Moore as architectural interns to work on the project design, development and documents. This funded project was recognized with two double-blind peer-reviewed design awards.
- 2011 - 2012 “Homo Ludens | Homo Faber” is an educational design build project recognized with two double-blind peer-reviewed awards. Studio participants were collaborators: Mohammad Alawadhi, Drew Allen, Dana Decuzzi, Paul De La Torre, Jesus Alan Figueroa, Estephanie Graham, Karl Hansen, Laura Huylebroeck, Tyler Jorgenson, David Koenst, Dan Kozak, Ashley Loberg, Kevin Moore, Lidia Orda Diaz, Sam Paz, Andre Rodrigue, Jim Sauer, Jeremy Shough, Brandon Swigart.
- 2010 - 2011 “Bus Shelter Prototypes in the Sonoran Desert,” a double-blind peer-reviewed paper was based on the research conducted and projects delivered through an educational design build studio. Studio participants were collaborators: Emily Akaba, Dani Alvarez, Sean Bollinger, Paul Frederickson, Romiar Karamooz, Erik Luhtala, Stephanie Mason, Virginia Munson, Reid Olson, Valerie Pellet, Steven Rosier, Evan Shallcross, Cathy Thompson, Kevin Turner, Sean Vanderwall.

STUDENT AWARDS UNDER DIRECTION

- 2014 - 2015 Undergraduate Honors Grant; \$1500 awarded to Miriam Strauss for a research project on the sustainability of gridshell structures. I served as her advisor on the project.
- 2014 arc 451a AIA Design Excellence Honorable Mention; awarded to the Ross Creek studio for a project developed under my direction. Recipients: Erica Blank, Joeseeph DeBenny, Peng Gao, Ryan Haines, Claudia Hapenciuc, Michelle Leonard, Nikota Litzin, Dailong Ma, Stephanie Oleksa, Miriam Strauss, Michael Vo.
- 2013 Honorable Mention, 2013 ACSA Steel Competition: Building to Bridge; awarded to Jason Baiocchi and Jeremy Ribeck for a project developed under my direction in arc 402.
- 2011 Capstone Award and the arc 452 AIA Design Excellence Award; awarded to Dani Alvarez for a project developed under my direction.
- 2011 arc 451 AIA Design Excellence Award; awarded to the Bus Shelter Prototype studio for a project developed under my direction. Recipients: Emily Akaba, Dani Alvarez, Sean Bollinger, Paul Frederickson, Romiar Karamooz, Erik Luhtala, Stephanie Mason, Virginia Munson, Reid Olson, Valerie Pellet, Steven Rosier, Evan Shallcross, Cathy Thompson, Kevin Turner, Sean Vanderwall.

THESIS / CAPSTONE PROJECT DIRECTION

2015	Shaun Hallissey: Sustainable Solutions for a new Tucson Transit Center; MS Thesis committee member
2014	Boyang Shi: Development Of High Performance Semi-Temporary Disaster Relief Shelters In China; MS Thesis committee chair
2014	Mohamedn El Zomor: A Sustainable Construction Index: that Bridges the Gap Between Building Design and Operation; MS Thesis committee member
2014	Mariya Salo: Seasonal Thermal Energy Storage and Supply for Residential Buildings in Southern Russia; MS Thesis committee member
2012	Belal K. Abboushi: Effects of Adaptive Shading and Selective Reflector Light Shelf on Office Buildings Energy Efficiency and Daylight Performance in Hot Arid Regions; MS Thesis committee member
2012	Grant Mosey: Location-Responsive Design In The Mixed-Use High-Rise Typology; MS Thesis committee member
2011	Omar Dhia Al-Hassawi: Design Of Thermally Comfortable Outdoor Spaces For Mosques In Hot Arid Regions: A Case Study Of The Jawharatul Islam Mosque In Phoenix, Arizona; MS Thesis committee member
2011	Virgina Cardona: Net-zero Through Re-purposed Materials; MS Thesis committee member
2010	James Keller: A Model Sustainable Public High School for the Tucson Region; MS Thesis committee member
2010	Luca Serpelloni: Geothermal Energy; Theory and Application for Residential and Small Commercial Use; MS Thesis committee member

TEACHING AWARDS

2015	AIA Arizona Unbuilt Design Merit Award <i>double-blind peer-reviewed</i> Project: Ross Creek Centre for the Arts Dining Hall [educational design build] This award by the <i>American Institute of Architects Arizona</i> , recognizes achievement in architectural design for commissioned projects that may or may not be built.
2015	AIA Arizona Distinguished Building Citation Award <i>double-blind peer-reviewed</i> Project: Homo Ludens Homo Faber (AzCA Playground) [educational design build] This award by the <i>American Institute of Architects Arizona</i> , recognizes excellence in design, planning, and construction of projects located anywhere in the world that are designed by AIA Arizona architects registered and licensed in the State of Arizona and honors the highest standards of design in response to user requirements, site, context, climate, and environment.
2015	ACSA Design Build Award <i>double-blind peer-reviewed</i> Project: Homo Ludens Homo Faber (AzCA Playground) [educational design build] This award by the <i>Association of Collegiate Schools of Architecture</i> honors the best practices in school-based design-build projects. It recognizes projects that demonstrate how faculty, students, and schools work to realize design-build projects. Curricula based design-build projects can encompass a variety of endeavors, scope, scale and setting, but at their core they present constructions that illustrate design learning outcomes from conception to tangible fruition.

- 2014 **AIA Southern Arizona Distinguished Building Merit Award** *double-blind peer-reviewed*
Project: Arizona's Children Association (Azca) Playground [educational design build]
 This award by the *American Institute of Architects, Southern Arizona Chapter*, recognizes excellence in design, planning, and construction of projects located anywhere in the world that are designed by *AIA Southern Arizona* architects registered and licensed in the State of Arizona and honors the highest standards of design in response to user requirements, site, context, climate, and environment.
- 2013 **AIA Arizona 2013 Educator Award** *single-blind peer-reviewed*
 This award by the *American Institute of Architects Arizona*, recognizes the fundamental importance of education in advancing the art and science of design, thus improving the quality of our environment. Further, AIA Arizona is vitally interested in education and lends its full support to public and private schools as they seek to achieve and maintain excellence in architecture and architectural education. AIA Arizona wishes to make this interest tangible by honoring the significant achievements of individuals and academic programs.
- 2010, 11, 12 **Robert Giebner Commendation for Teaching**
School of Architecture, CAPLA, University of Arizona
 In honor of the late Robert Giebner, former professor and Dean, is determined by vote of all Architecture students. Recognizing architecture faculty of excellence in the art of teaching, particularly for developing potential and expanding horizons. Students are asked to consider: enthusiasm, knowledge and love of the subject matter, preparation and organization, clarity of presentation, stimulation of interest and thinking, course content, and interaction and rapport with students.

CONTRIBUTIONS TO INSTRUCTIONAL INNOVATIONS AND COLLABORATIONS

RESEARCH ON CURRICULUM AND PEDAGOGY

- 2010 - present **Student-Centered Design-Build Pedagogy**
 I utilize educational design-build projects as research and service learning vehicles for upper level students with the objective of cultivating knowledge and skills that will better prepare students for the professional practice of architecture and to challenge professional paradigms. I have developed a student-centered pedagogy, which challenges and empowers students to negotiate real world conditions and constraints, allowing them to translate their ideas into reality. This pedagogy emphasizes the theory and practice of collaboration and performance. It has been disseminated through published papers, conference presentations and correspondence with faculty at peer institutions. It is being studied and will be disseminated by human ecologists on the *Thinking While Doing Grant*, an international multi-university grant sponsored by the *Social Sciences and Humanities Research Council of Canada* researching best practices in Educational Design-Build.
- 2010 - present **Empirical Structures Pedagogy**
 I am responsible for the re-conception and development of the architectural structures curriculum at the University of Arizona, utilizing the experience of the laboratory to cultivate in students a conceptual understanding of structures and a genuine structural intuition. I consider intuition to be the highest form of knowledge, that which is fluent and necessary for the meaningful integration of structure into architectural design. Students analyze physical conditions, develop structural designs in diagrams and drawings, and fabricate their designs. The physical structural models are tested in a collective forum where we analyze and diagram their performance. Each project is iterative, giving students the opportunity to improve and find knowledge and success through failure. Projects in the beginning of the structures sequence emphasize abstract principles; projects later in the curriculum emphasize architectural integration. Traditional laboratory projects in architectural structures courses are isolated experiences that emphasize verification and support lectures and computational exercises. My laboratory approach centralizes the lab experience as the primary learning vehicle, utilizing lectures and computation to support the laboratory experience. The spirit of this approach emphasizes discovery, creativity and invention within an expressive and expansive structural realm. This Empirical Pedagogy has been disseminated through published papers, conference presentations and correspondence with faculty at peer institutions.