

**Curriculum Vitae**  
**Altaf Engineer**  
**Ph.D., R.A., LEED AP BD+C**

Assistant Professor  
University of Arizona  
School of Architecture (SoA) | Institute on Place, Wellbeing, and Performance (IPWP)  
College of Architecture, Planning & Landscape Architecture (CAPLA)  
1040 North Olive Road, PO Box 210075, Tucson, AZ 85721

Office: (520) 626-3811  
Email: [aengineer@email.arizona.edu](mailto:aengineer@email.arizona.edu)  
Website: [www.altafengineer.weebly.com](http://www.altafengineer.weebly.com)

## EDUCATION

- 2015      **Ph.D. in Architecture**  
The Illinois School of Architecture, University of Illinois at Urbana-Champaign  
Dissertation: *State of the Art: Museum Additions and Their Impact on Occupant Experience*  
Advisor: Dr. Kathryn H. Anthony, Ph.D.  
Awarded the **Illinois Distinguished Fellowship**
- 2005      **Master of Architecture**  
The Illinois School of Architecture, University of Illinois at Urbana-Champaign  
Thesis: *Museum of Light: An Investigation into the Quality of Naturally Illuminated Spaces*  
Awarded the **Architectural Research Colleges Consortium (ARCC) King's Merit Medal for Excellence in Architectural + Environmental Behavior Research**
- 2002      **Bachelor of Architecture**  
IES College of Architecture, University of Mumbai, India

## PROFESSIONAL LICENSURE AND CERTIFICATIONS

- 2017-present      Registered Architect (R.A.), New York, USA, License #039740
- 2017-2019      National Council of Architectural Registration Boards (NCARB) Certified, NCARB Certificate #87188
- 2011-present      Leadership in Energy and Environmental Design Accredited Professional with expertise in building design and construction (LEED AP BD+C)
- 2008-2018      Registered Architect, India, Council of Architecture (CoA)

## HONORS AND AWARDS

### PEER-REVIEWED AWARDS

- 2018      **Emerging Legacy Award, College of Fine & Applied Arts, University of Illinois at Urbana-Champaign.** Award recognizing alumni who have demonstrated courage, curiosity, and

passion in their work and to honor individuals who have impacted their fields in transformative ways—catalysts with a distinguished service to the arts. Nominated and selected after an internal review by a committee of representatives from across the college, community, and administration.

- 2016 **German Design Council Iconic Award** in the category of **Concept>Visionary Architecture** with the distinction of “Iconic Awards 2016 – Best of Best” for the Hex House: A rapidly deployable, dignified shelter for displaced populations; award ceremony held in Munich, Germany on October 4<sup>th</sup>, 2016.  
Role: Architect, team of 5, Architects For Society, global non-profit organization.
- 2016 **American Architecture Prize 2016, Bronze medal in Architectural Design/Social Housing Category** for the Hex House: A rapidly deployable, dignified shelter for displaced populations.  
Role: Architect, team of 5, Architects For Society.
- 2011-2015 **Illinois Distinguished Fellowship Award**, University of Illinois at Urbana-Champaign. Amount: Annual stipend of \$24,000 for 3 years.
- 2013-2014 **Campus Research Board Award**, Co-recipient, University of Illinois at Urbana-Champaign, Academic Year 2013-14.
- 2004-2005 **Architectural Research Colleges Consortium (ARCC) King’s Merit Medal** for Excellence in Architectural + Environmental Behavior Research.

#### HONORS

- 2004 **National Gargoyle Honor Society**, University of Illinois at Urbana-Champaign.

#### GRANTS AND FUNDED RESEARCH

##### FEDERAL

- 2017-2020 **Multimodal Objective Sensing to Assess Individuals with Context (MOSAIC) Rapid Automatic & Adaptive Model of Performance Prediction (MOSAIC RAAMP2) Program**  
Role: **Co-Principal Investigator** (40%, within UA IPWP team)  
PI: Matthias Ziegler, Ph.D. (Lockheed Martin)  
Co-PIs: Esther M. Sternberg, MD, Matthias Mehl, Ph.D.  
Source: Intelligence Advanced Research Projects Activity (IARPA)  
Amount: \$1.9 million

##### STATE

- 2020-2022 **Wearable devices: Project measuring and manipulating CO2 in personal CO2 bubble during sleep, with measurement of post-sleep cognitive performance**  
Role: **Co-Principal Investigator** (10%)  
PI: Esther M. Sternberg, MD  
Co-PIs: Sairam Parthasarathy, MD, Young-Jun Son, Ph.D., Johnny Ray Runyon, Ph.D., Nirav Merchant  
Source: Arizona Commerce Authority (ACA) Wearables Applied Research Center  
Amount: \$366,507

2020-2021 **Sustainable Communities Accessing Lending and Expertise Upon Performance (SCALE UP) Program: Research partnership towards developing a new community-engaged pedagogy in building performance, health, and wellbeing**  
Role: **Principal Investigator** (10%)  
Co-PI: Sandra Bernal, PhD  
Source: Arizona State Dept. of Administration and Department of Energy Green Fund via Local First Arizona (non-profit organization)  
Amount: \$2500, Fall 2020 + \$2500, Spring 2021 (renewed)

## UNIVERSITY

2020-2021 **Assessment of Health, Building Design, and Movement to Mitigate At-Risk Spaces in Post-COVID-19 Campus Re-Entry**  
Role: **Co-Principal Investigator** (30%)  
Co-PIs: Esther M. Sternberg, MD, Bo Yang, Ph.D., Shujuan Li, Ph.D.  
Source: UA Research, Innovation & Impact (RII) Reopening Award  
Amount: \$35,000

2019-2021 **A Comparison of Virtual Reality versus Real-life Experiences of Labyrinths to Test the Validity of Virtual Reality Simulations and their Influence on Human Performance.**  
Role: **Co-Principal Investigator** (40%)  
PI: Omar Youssef, Ph.D.  
Source: UA Research, Discovery and Innovation (RDI) Research Seed Grant, Building a Changing World Initiative  
Amount: \$6799

2019-2020 **Ambient and Personal CO2: Impacts on Sleep and Cognitive Performance in Aging Populations towards Mitigation with Real-time Automatic Adaptive Connection of Human Responses to Building Systems through the Internet of Things.**  
Role: **Co-Principal Investigator** (25%)  
PI: Esther M. Sternberg, MD  
Source: UA Research, Discovery and Innovation (RDI) Research Seed Grant, Building a Changing World Initiative  
Amount: \$7000

2019-2020 **Impact of CO2 in the built environment on sleep quality and cognitive function in sleep and circadian science laboratories for better individual health and wellbeing outcomes**  
Role: **Principal Investigator** (50%)  
Co-PIs: Esther M. Sternberg, MD, Erica Baranski, Ph.D., Sai Parthasarathy, MD  
Source: UA CAPLA Research Seed Grant  
Amount: \$7000

2019 **Pre and Post-move Study in Cardiac Step-down Unit at UA Banner Medical Center**  
Role: **Co-Principal Investigator** (30%)  
PI: Esther M. Sternberg, MD  
Co-PIs: Erica Baranski, Ph.D., Young-Jun Son, Ph.D., Bijoy Chowdhury, Ph.D., Sara Masoud, Ph.D.  
Source: UA Andrew Weil Center for Integrative Medicine  
Amount: \$5000

2019 **Designing for Healthy People and a Healthy Planet: Envisioning Minnesota's Expo 2027**  
Role: **Co-Principal Investigator** (50%)  
Co-PI: Lisa Schrenk, Ph.D.  
Source: UA CAPLA Teaching Innovation Grant

Amount: \$9,462

- 2019 **Designing for Healthy People and a Healthy Planet: Envisioning Minnesota's Expo 2027**  
Role: **Co-Principal Investigator** (50%)  
Co-PI: Lisa Schrenk, Ph.D.  
Source: UA Student/Faculty Interaction (SFI) Grant, Student-Faculty Engagement, UA Campus Life  
Amount: \$500
- 2018 **Acquisition of Lyophilization and Refrigeration Equipment**  
Role: **Co-Principal Investigator** (20%)  
PI: Aletheia Ida, Ph.D.  
Co-PIs: Pierre Lucas, Ph.D., Jonathan Bean, Ph.D.  
Source: University of Arizona Water, Environmental & Energy Solutions (WEES) Equipment/Infrastructure Grant.  
Amount: \$20,163
- 2013 **The design of “starchitect” museum additions and their impact on occupants’ experiences**  
Role: **Co-Principal Investigator** (50%)  
Co-PI: Professor Kathryn H. Anthony, Ph.D., University of Illinois at Urbana-Champaign.  
Source: **University of Illinois at Urbana-Champaign (UIUC) Campus Research Board Award**  
Amount: \$9,462

#### **PATENT IN-PROGRESS (Filed September 18, 2020)**

- 2020 DASH-SAFE (**DASH**board-**S**tress **A**t-Risk **F**acilities **E**nvironment): Systems and Methods for a Multi-Modal Geographic Information System (GIS) Dashboard for Real-time Mapping of Perceived Stress, Health and Safety Behaviors, Facilities Design and Operations, and Movement: Surveillance and Mitigation of Spaces for an At-Risk Clustered Population in a Post-COVID-19 Campus-Like Environment  
Role: **Co-Principal Investigator** (12.5%)  
Co-PIs: Esther M. Sternberg, Bo Yang, Shujuan Li, Matthias Mehl, Saurabh Jain, Bijoy Chowdhury, Md Tariqul Islam, Son Young-Jun, Altaf Engineer, Philip Stoker, Yijie Chen

#### **PUBLICATIONS**

(\*published as a graduate student; †graduate student advisee)

#### **PEER-REVIEWED BOOKS**

- 2018 **Engineer, A.** and Anthony, K. (Lead author, 90% contribution) (2018). *Shedding new light on art museum additions: Front stage and back stage experiences*. New York, NY: Routledge Research in Architecture Series, Taylor & Francis Group.

#### **Edited Collection**

- 2020 **Engineer, A.**, Sternberg, E.M., and Ida, A. (Eds.) (Lead editor, 75% contribution) (2020). *Healing Spaces: Designing Physical Environments to Optimize Health, Wellbeing and Performance*. *International Journal of Environmental Research and Public Health (IJERPH)* Special Issue Book Reprint. Basel, Switzerland: MDPI.

### Book in Progress

- 2019 **Engineer, A.**, Ida, A. and Sternberg, E.M. (Under contract, publication expected: 2021, January). *Measuring the Impact of the Built Environment on Health, Wellbeing and Performance: Techniques, Methods, and Implications for Design Research*. Health and the Built Environment short-form focus series. Routledge, Taylor and Francis Group.

### Book Chapter

- 2020 **Engineer, A.** (2020, August). Immersive Physical Environment: Office Interiors and Preparedness. In Mechanick, J. & Kushner, R. (Eds.), *Building and Implementing a Lifestyle Medicine Program: From Concept to Clinical Practice* (pp. 11-15). Springer.

### Book Chapter in Progress

- 2021 Hyde, J., Runyon, R., **Engineer, A.**, Kramer B., and Sternberg, E.M. (Under contract, publication expected: 2021, January). Industrial/Organizational (incl. workplace design) Mobile Sensing Technology. In Mehl, M., Wrzus, C., Eid, M. & Harari, G. (Eds.) *Mobile Sensing in Psychology: Methods and Applications (A Handbook)*. Guilford Books.

### PEER-REVIEWED JOURNAL ARTICLES

- 2020 Bernal, S., **Engineer, A.**, and Chalfoun, N. (2020, May) (Co-author, 30% contribution). Assessment of the implications of natural and mechanical ventilation on exposure to dust in the residential sector. *Vivienda y Comunidades Sustentables (Housing and Sustainable Communities)*, 4(7), 77-91.
- 2020 **Engineer, A.**, Ida, A., and Sternberg, E.M. (Lead author, 75% contribution) (2020, February). Healing Spaces: Designing Physical Environments to Optimize Health, Wellbeing and Performance. Editorial: *International Journal of Environmental Research and Public Health (IJERPH)*, 17(115), 1-4.
- 2019 **Engineer, A.**, and Bernal, S. (Lead author, 75% contribution) (2019, July). Towards a human-centered approach to art museum design. *The International Journal of Architectonic, Spatial, and Environmental Design*, 13(2), 1-12.
- 2019 Sternberg, E.M., **Engineer, A.**, and Oberman, H. (Co-authors, 33% contribution by each) (2019, April). Trauma, place, and transformation: Commentary on Place Spirituality. *Archive for the Psychology of Religion*, 41(1), 26-32.
- 2018 **Engineer, A.**, Sternberg, E.M., and Najafi, B. (Lead author, 75% contribution) (2018, August). Designing interiors to mitigate physical and cognitive deficits related to aging and promote longevity in older adults: A review. *Gerontology*, 64(6), 612-622.
- 2015 \***Engineer, A.** and Bliss, A. (2015, February) (Co-authors, 50% contribution by each). [Re]Making History: Authenticity, architecture, and tourism. *International Journal of the Constructed Environment*, 5(3-4), 21-33.

### Peer-reviewed journal articles in progress

- 2021 Kraft, A., Danvers, A., Perez, A.M., Notaro, G.M., Baranski, E.N., Brad J. Galego, B.J. Frank Vetesi, Gabriel J. Collins, Matthew Widjaja, Walker Alexander, **Engineer, A.**, Lindberg, C.M., Sternberg, E. M., Mehl, M., Ziegler, M. D. (Under review) (Co-author, 10% contribution).

Longitudinal Multi-Sensor Physiological and Environmental Data of Corporate Employees.  
*Scientific Data*, Nature.

#### PEER-REVIEWED CONFERENCE PAPERS

- 2021 +Alaqtum, T., **Engineer, A.** & Moeller, C. (2021, April - accepted). From perception to design: Daylight glare mitigation in architectural spaces. *ARCC Conference Proceedings*, Tucson, AZ.
- 2020 **Engineer, A.** (November 2020). New synergies between research, education, and practice for health and wellbeing outcomes in the built environment. *EAAE-ARCC International Conference Proceedings*, Valencia, Spain.
- 2020 +Alhabib, G., Bernal, S., Ida, A., and **Engineer, A.** (October 2020). Experimental tests of CAM Plants and Hydrogels for outdoor air pollutant filtration systems. Proceedings of *The 16th Conference of the International Society of Indoor Air Quality & Climate (Indoor Air 2020)*, 1-6. Seoul, South Korea.

#### GUEST EDITOR, SPECIAL ISSUE, PEER-REVIEWED JOURNAL

- 2019-2020 Sternberg, E.M., **Engineer, A.**, and Ida, A. (Co-Editors. 33% contribution by each) (2020, January). Healing Spaces: Designing Physical Environments to Optimize Health, Wellbeing and Performance. *International Journal of Environmental Research and Public Health*, Special Issue.

#### EDITOR-REVIEWED RESEARCH PUBLICATIONS

- 2015 \***Engineer, A.** (2015, April). The art of illumination: Daylighting in museums and its implications. *EDRA Connections*, 5, 8-11.

#### BOOK REVIEWS

- 2017 \***Engineer, A.** (2017, February 13): Olympic housing: a critical review of London 2012's Legacy. *Journal of Tourism and Cultural Change*, 15(1), 99-101.
- 2014 \***Engineer, A.** (2014, April 23). Book review: Museum architecture: A new biography (2<sup>nd</sup> ed.). *Journal of Tourism and Cultural Change*, 12(4), 1-3.

#### PEER-REVIEWED CONFERENCE ABSTRACTS+PRESENTATIONS

- 2021 +Alaqtum, T., **Engineer, A.** & Moeller, C. (2021, April). From perception to design: Daylight glare mitigation in architectural spaces. *ARCC Conference*, Tucson, AZ (Virtual).
- 2020 **Engineer, A.** (November 2020). New synergies between research, education, and practice for health and wellbeing outcomes in the built environment. *EAAE-ARCC International Conference*, Valencia, Spain (Virtual).
- 2020 +Alhabib, G., Bernal, S., Ida, A., and **Engineer, A.** (October 2020). Experimental tests of CAM Plants and Hydrogels for outdoor air pollutant filtration systems. Proceedings of *The 16th Conference of the International Society of Indoor Air Quality & Climate (Indoor Air 2020)*, 1-6. Seoul, South Korea.

- 2020 **Engineer, A.** (2020, April). Confluence of design and technology to promote healthy aging and longevity in older adults. *Environmental Design Research Association (EDRA51)*, Tempe, AZ (Virtual).
- 2019 **Engineer, A.**, and Sandra Bernal (2019, November). Towards a human-centered approach to art museum design. Learning from volunteers' perceptions and experiences. *Inclusive Museum Conference*, Buenos Aires, Argentina (Virtual).
- 2019 **Engineer, A.**, and Sandra Bernal (2019, June). Environmental Design Strategies to Improve Visitation in State Museums Situated in Hot, Arid Climatic Conditions in the Southwest U.S. *Shared Cultural Heritages 2: Memory, Spaces, Experiences, and Boundaries*, San Luis Potosí, Mexico (Virtual).
- 2019 **Engineer, A.**, and Sandra Bernal (2019, May). Towards a human-centered approach to art museum design. *Environmental Design Research Association (EDRA50)*, Brooklyn, NY.
- 2019 Ziegler, M., Ha, R., Kraft, A., Perez, A., Danvers, A., Mehl, M.R., Sternberg, E.M., **Engineer, A.**, Baranski, E., Danvers, A.F. (2019, July). Predictions of job performance and cognitive constructs using a combination of individual, interpersonal and environmental sensors. *10<sup>th</sup> International Conference on Applied Human Factors and Ergonomics (AHFE 2019)*, Washington DC.
- 2019 Baranski, E., Danvers, A.F., Kraft, A., Perez, A., Ziegler, M., Lindberg, C., **Engineer, A.**, Sternberg, E.M., Mehl, M.R. (2019, May). Personality prediction in aerospace engineers using a comprehensive sensing suite. *3<sup>rd</sup> Association for Psychological Science (APS) Annual Convention*, Washington DC.
- 2018 **Engineer, A.**, Sternberg E.M., and Ida A. (2018, July). University of Arizona Institute on Place, Wellbeing, and Performance, and the Master of Science in Architecture Health & Built Environment (MS. Arch HBE) curriculum. *AIA Collaborative Research Summit, AIA Design and Health Consortium*, Minneapolis, MN.
- 2017 Sallam, A. and **Engineer, A.** (2017, November). The Hex House: A rapidly deployable, dignified home. Presenter and panelist, Shelter with Dignity workshop, *2017 AIA Minnesota Convention*.
- 2014 \***Engineer, A.** and Bliss, A. (2014, May). [Re]Making History: Authenticity, Architecture, and Tourism. *EDRA45 Conference, New Orleans*.
- 2012 \***Engineer, A.** (2012, May). In the Window Seat: The Influence of Windows on Occupants' Sitting Preferences in Educational Environments. *EDRA44 Conference, Seattle*.
- 2005 \***Engineer, A.** (2005, May). Bright ideas: The Increasing Importance of Daylight in Museum Settings. *EDRA36 Conference, Vancouver*.

## INVITED TALKS, PANELS, PRESENTATIONS, AND WORKSHOPS

### KEYNOTE SPEECH

- 2019 **Engineer, A.** (2019, November). Human-centered and equitable built environments: Making an impact for health and wellbeing for all. *Second International Conference on Architecture 2019*, University of Sonora, Hermosillo, Sonora, Mexico. Theme: *Resilient Communities*.

## SYMPOSIUM PANELS

- 2020 Sternberg, E.M., Yang, B., Li, S., Young-Jun, S., & **Engineer, A.** (2020, November). DASH-SAFE: A personal real-time risk-assessment, risk-management, navigation and automated alarm tool. *COVID-19 Symposium*, The University of Arizona Health Sciences Center (Virtual).
- 2020 Sternberg, E.M., Yang, B., Li, S., Young-Jun, S., & **Engineer, A.** (2020, September). DASH-SAFE: A Multi-Modal GIS-based Real-Time COVID Risk Assessment, Management, & Navigation Tool. *Restruct Built Environment Research Symposium (RESTRUCT): Mid-Pandemic Adaptation*, University of Arizona, Tucson, AZ.
- 2020 Sternberg, E.M., **Engineer, A.**, & Youssef, O. (2020, October). Health and Wellbeing in the Built Environment: Intro and Wearable health: from molecules to environment (Esther M. Sternberg); Translating research into design outcomes through curriculum and research (Altaf Engineer); Virtual Reality and Human Performance (Omar Youssef). *Centre for Conscious Design (CCD) Festival*, Phoenix (Virtual).
- 2019 Youssef, O. & **Engineer, A.** (2019, December). A Comparison of Virtual Reality versus Real-life Experiences of Labyrinths to Test the Validity of Virtual Reality Simulations and their Influence on Human Performance. Invited panel by Sternberg, E.M., and Insel, K.: New Technologies for Measuring, Operating and Designing the Built Environment for Optimal Health. *Restruct Built Environment Research Symposium*, University of Arizona, Tucson, AZ.

## PRESENTATIONS

- 2018 **Engineer, A.** (2018, September). Health and wellbeing in the built environment: Connecting education, research, and practice. *Illinois School of Architecture, University of Illinois at Urbana-Champaign, IL.*
- 2018 **Engineer, A.**, Chambers, S., Youssef, O., & Sternberg, E.M. (2018, April). Comparison of virtual reality versus real-life experiences of labyrinths. *UA Integrative Medicine Research Initiative*, University of Arizona.
- 2017 Kampschroer, K., Sternberg, E., Gilligan, B., Lindberg, C., Canada, K., & **Engineer, A.** (2017, November). Wellbuilt for Wellbeing Findings. *Army Research Lab's Human Research and Engineering Program*, Aberdeen Proving Ground, MD.

## WORKSHOPS

- 2021 Restruct Built Environment Research Symposium (RESTRUCT) (2021, February). *Built Environment+Data+Post-Pandemic Adaptation*, University of Arizona, Tucson, AZ.
- 2018 Design and health education, and Research funding opportunities in design and health (Two workshops) (2018, July). *AIA Collaborative Research Summit, AIA Design and Health Consortium*, Minneapolis, MN.
- 2018 Brain Health & Architecture Research Workshop (2018, April – via conference call). *Academy of Neuroscience for Architecture (ANFA)*, University of California San Diego Center for Healthy Aging.

## ACADEMIC POSITIONS



- 2017-present **Assistant Professor**, School of Architecture, College of Architecture, Planning & Landscape Architecture (CAPLA), University of Arizona
- Assistant Professor**, Institute on Place, Wellbeing, and Performance (IPWP), University of Arizona
- Faculty Advisor**, M.S.Arch. in Health and the Built Environment (HBE) focus area at the UA School of Architecture (SoA), CAPLA
- Assistant Professor (By affiliation)**, Arid Lands Resource Sciences Graduate Interdisciplinary Programs (ALRS GIDP), University of Arizona
- Assistant Professor (By affiliation)**, Applied Intercultural Arts Research Graduate Interdisciplinary Programs (AIAR GIDP), University of Arizona
- 2017-2020 **Graduate Program Chair**, M.S.Arch. in Health and the Built Environment (HBE) program at the UA School of Architecture (SoA), CAPLA
- 2016 **Faculty Associate**, The Design School, Herberger Institute for Design and the Arts, Arizona State University
- 2012-2014 **Instructor of Record**, Illinois School of Architecture, University of Illinois at Urbana-Champaign
- 2005 **Teaching Assistant**, Illinois School of Architecture, University of Illinois at Urbana-Champaign

## TEACHING

### NEW CURRICULUM DEVELOPMENT

- 2020-2021 *Health and Wellbeing in the Built Environment*. Microcampus course for Universidad Peruana de Ciencias Aplicadas (UPC), Lima, Peru
- 2019 *ARC 321: Building Technology II*. Required class for 4<sup>th</sup> year B. Arch students at UA SoA, co-taught with Valerie Lane, Senior Lecturer. Development of core technology class to align with new B. Arch Technology curriculum.
- 2017 Curriculum and coursework developed and proposed to UA School of Architecture Curriculum Committee (SoA CC) in Fall 2018, approved by SoA CC in Fall 2018 and UA Graduate College in Fall 2018:
- Master of Science in Architecture Health and Built Environment subplan (MS. Arch HBE)
  - Core class for MS. Arch HBE degree: *ARC 497B/597B: Health and Wellbeing in the Built Environment: A Tour of the Senses and Beyond*. Redevelopment of seminar originally developed and taught by Dr. Casey Lindberg.
  - Core class for MS. Arch HBE degree: *ARC 496D/596D: Social and Behavioral Issues in the Built Environment*
  - Elective seminar for MS. Arch: *ARC 496D/596D: Daylighting, Health, and Behavior*

### COURSES TAUGHT

University of Arizona  
School of architecture, CAPLA

- 2019-present  
Fall      **ARC 321: Building Technology II**
- 2018-present  
Fall & Spring      ARC 900: **MS. Arch Thesis Research**  
ARC 909: **MS. Arch Thesis Design Project**  
ARC 910: **MS. Arch Thesis Research Project**  
MS. Arch Health and Built Environment (HBE), Design and Energy Conservation (DEC),  
Emerging Building Technology (EBT), and Independent Research Option (IRO) subplans
- 2018-2020  
Fall & Spring      ARC 496d/596d: **Social and Behavioral Issues in Built Environments**  
Graduate and undergraduate (4<sup>th</sup> and 5<sup>th</sup> year) design seminar
- 2018-present  
Fall & Spring      ARC 496d/596d: **Daylighting, Behavior, and Health**  
Graduate and undergraduate (4<sup>th</sup> and 5<sup>th</sup> year) design seminar
- 2018-present      ARC 497d/597d-002: **Health and Wellbeing in the Built Environment**  
Graduate and undergraduate (4<sup>th</sup> and 5<sup>th</sup> year) design seminar
- Fall 2019      **ARC 496b/596b: The Architecture of International Expositions:** Designing for Healthy People  
and a Healthy Planet – Envisioning Minnesota’s Expo 2027
- Fall 2019      **SBE (Sustainable Built Environments) 499: Independent Study**  
Crystal Ly, Senior, Neurology, College of Medicine Tucson, University of Arizona.
- 2019 Spring      **NSCS (Neuroscience and Cognitive Science) 492H-343: Honors Directed Research**  
Crystal Ly, Junior, Neurology, College of Medicine Tucson, University of Arizona.

Arizona State University  
Design School, Herberger Institute for Design and The Arts

- 2016 Spring      DSC 558: Daylighting  
**Graduate design seminar**, students in Architecture, Interior Architecture, Interior Design, and  
Industrial Design

University of Illinois at Urbana-Champaign  
Illinois School of Architecture

- 2014 Spring      Arch 374: Architecture and the City  
**Junior design studio**, section of 15 students.
- 2013 Fall      Arch 475: Institute for Glass Technology  
**Senior capstone design studio**, section of 16 students.
- 2013 Spring      Arch 272: Pavilion, Single Family Home  
**Sophomore design studio**, class of 108 students.
- 2012 Fall      Arch 475: The Museum of Ancient Life  
**Senior and Track 3 Graduate capstone design studio**, section of 16 students.

2005 Spring Arch 476/562: Healthcare studio sponsored by Canon Design  
**Senior and Track 3 Graduate design studio**, class of 18 students.

## STUDENT DIRECTION

### Thesis Advising: Chair

**MS.Arch Health and Built Environment (HBE), ARC 900/910**  
2020-2021 Kylie Biddle, SoA, CAPLA, University of Arizona. Thesis title: *TBD*  
2020-2021 Miguel Stroe, SoA, CAPLA, University of Arizona. Thesis title: *TBD*  
2019 Ghayda Alhabib, SoA, CAPLA, University of Arizona. Thesis title: *Passive strategies for indoor air quality to balance energy and health in residential environments*  
2017-2019 Ryan Shindler, SoA, CAPLA, University of Arizona. Thesis title: *Investing in better outcomes: The impact of daylight in the built environment*

**MS.Arch Design and Energy Conservation (DEC), ARC 900/910**  
2020-2021 Venus Abdollahi, SoA, CAPLA, University of Arizona. Thesis title: *Natural light and adaptive building facades for work environments.*  
2021 Saleh Naseer, SoA, CAPLA, University of Arizona. Thesis title: (tentative) *Environmental analysis of educational environments to improve student learning.*

### Thesis Advising: Committee

**MS.Arch Design and Energy Conservation (DEC), ARC 900/910**  
2020-2021 Saleh Naseer, SoA, CAPLA, University of Arizona. Thesis title: *Daylighting and acoustics in learning work environments.*  
2019 Tasbeeh Alaqtum, SoA, CAPLA, University of Arizona. Thesis title: *A methodology to assess and mitigate daylight discomfort glare and provide views in daylight learning*  
2018 Elizabeth Pietrack, SoA, CAPLA, University of Arizona. Thesis title: *Daylighting Design for Green Homes*

**MS.Arch Emerging Building Technologies (EBT), ARC 900/910**  
2020-2021 Robert Heil, SoA, CAPLA, University of Arizona. Thesis title: *TBD*  
2019 Maryam Moradnejad, SoA, CAPLA, University of Arizona. Thesis title: *Design of innovative wind-catcher systems.*

**MS.Arch Independent Research Option (IRO), ARC 900/909**  
2018-2019 Samira Mivehchian, SoA, CAPLA, University of Arizona. Thesis title: *Homelessness along the Sides of Tucson's Washes*

### MS. Design Thesis Committee Member

2012-2014 Manqian Qian, MS. In Industrial Design, School of Art and Design, University of Illinois at Urbana-Champaign. Thesis title: *Coffee shops, environmental behavior, and design*

### Honors Thesis Advising

2019-2020 Koby Jargstorf, College of Public Health, University of Arizona. Thesis title: *Microgreenery in a Megacity: The Interactions Between Street Greenery and Health Outcomes in Two Cities*

### Internship Supervision

**Preceptor/Internship Supervisor**  
2018-2019 Julia Duken, Junior, College of Public Health, University of Arizona.

2020-2021 Beth Kramer, Graduate student, College of Public Health, University of Arizona.

#### PEER-REVIEWED STUDENT AWARDS UNDER DIRECTION

2020 **Architectural Research Colleges Consortium (ARCC) Kings Medal Award for Excellence in Design + Environmental Behavior Research.** Ghayda Alhabib, MS.Arch HBE Candidate and Student Advisee: 2019 -2020.

2020 **Highest Scholastic Award (UA CAPLA).** Ghayda Alhabib, MS.Arch HBE Candidate and Student Advisee: 2019 -2020.

2018-2019 **The American Institute of Architects' Academy of Architecture for Health 2018-2019 AIA Arthur N. Tuttle, Jr. Graduate Fellow in Health Facility Planning and Design.** Ryan Shindler, MS.Arch HBE Candidate and Student Advisee: 2018 -2019. Award amount: \$14,500

2019-2020 **UA Honors Spirit of Inquiry Research Award.** Koby Jargstorf, Honors student, College of Public Health. Honors thesis advisee: 2019-2020. Award amount: unknown.

#### SERVICE

##### NATIONAL AND INTERNATIONAL

2020-2021 **Peer reviewer**, conference abstract and paper submissions, *Architectural Research Centers Consortium (ARCC) 2021: Performative Environments*, Tucson, AZ

2020 **Book proposal referee**, Fairchild Books, a division of Bloomsbury Publishing, Inc.

2020 **Research Consultant**, Our Lady of the Wayside School Arlington Heights, IL, student team for City Shaper Challenge competition. *Research project on workplace lighting for better mental health.* Award won, for Core Values and Teamwork.

2019 **Peer reviewer**, *International Journal of Experimental, Clinical, Behavioral and Technological Gerontology (Gerontology)*, Karger Publishers

2018 **Book proposal referee**, Routledge Research in Architecture Academic Monograph series

2015-2016 **Peer reviewer**, conference abstract and paper submissions, *Environmental Design Research Association Conference (EDRA) 2016*, Raleigh NC

2014 **Associate editor and referee**, *International Journal of the Constructed Environment*, Common Ground Publishers

##### UNIVERSITY

2020-2021 **Participant**, University of Arizona Inclusive Leadership Cohort Certificate Program (ILCC)

2019-2021 **Member**, University of Arizona Center for Integrative Medicine (UA CIM) Committee for new UA CIM building programming + post-COVID-19 design

2019-present **Member**, new UA Graduate Interdisciplinary Programs (GIDP) Gerontology graduate degree program working group

- 2019 **Member and Design Lead**, Advisory Committee, UA Health Science strategic plan initiative 5.1: Tech. solutions for health - Design of a closed-loop sensor lab in the UAHS Library.
- 2019 **Member**, University of Arizona Planning, Design, and Construction Search Committee for architecture firm and statements of qualifications review, new UA CIM building
- 2019 **Member**, University of Arizona Human Performance Network
- 2019 **Member**, Advisory Committee, UA Health Science strategic plan initiative 3.3: Next Generation Model for Healthy Aging. Working Group: Safe and Smart Living Environments.
- 2018 **Member**, UA Strategic Planning Committee on Health
- 2018 **Member**, UA Integrative Medicine Research Initiative Workshop
- 2017 **Co-leader**, Strategic Planning Focus Group for Built Environment and Human Health, UA Institute of Energy Solutions

#### COLLEGE

- 2019-2021 **Member**, ARCC Conference Organizing Committee
- 2019 **Member**, Search Committee for CAPLA Course Design Specialist
- 2019-2020 **Member**, CAPLA Diversity and Inclusive Excellence Committee
- 2018-2019 **Co-chair**, CAPLA Diversity and Inclusive Excellence Committee
- 2018 **Member**, CAPLA Doctoral Programs Task Force.
- 2018 **Member**, CAPLA Strategic Planning Research Advisory Group
- 2018 **Chair**, Search committee for UA IPWP Postdoctoral Research Associate
- 2017-present **Organizational Affiliate and Liaison**, AIA – ACSA Design & Health Research Consortium

#### SCHOOL

- 2021 **Member**, M. Arch Admissions Committee
- 2020-present **Faculty Advisor**, Master of Science in Architecture program with Health and the Built Environment (MS. Arch HBE) focus area.
- 2020-present **Member**, MS. Arch Committee and Admissions
- 2019 **Member**, Search Committee for SoA Program Coordinator
- 2019-2020 **UA School of Architecture Liaison**, The National Organization of Minority Architects (NOMAarizona)
- 2017-2020 **Chair, Master of Science in Architecture Health and Built Environment program**. Development and approval from Graduate College, marketing, and recruitment of graduate students for new degree curriculum beginning in Fall 2018.

- 2017-2020 **Member**, Graduate Executive Committee
- 2017-present **Member**, Technology Stream Committee
- 2017-present **UA School of Architecture Liaison**, Architectural Research Centers Consortium (ARCC)
- 2017-present **Design critic**, UA SoA, CAPLA graduate and undergraduate programs
- 2015-2016 **Design critic**, Undergraduate and graduate design studios in the Design School, ASU Herberger Institute for Design and the Arts
- 2011-2014 **Design critic**, undergraduate and graduate design studios in the School of Architecture, School of Art and Design, and Department of Landscape, University of Illinois at Urbana-Champaign
- 2017-2018 **Lead website developer**, IPWP website, University of Arizona
- 2013-2014 **Co-founder and organizer**, PhD Lecture Series: Erlanger Evenings, 2013 – 2014, School of Architecture, University of Illinois at Urbana-Champaign

## PROFESSIONAL EXPERIENCE

- 2015-present **Co-founder and Advisory board member, Architects for Society**  
 A global non-profit design practice with a mission to enhance the built environment of disadvantaged communities through affordable, innovative architecture and design.
- Selected Projects: “HexHouse” A rapidly deployable, low-cost, and sustainable housing solution for low-income and displaced populations; STEAM School in Haiti – Center for Excellence in Haiti for Haitian School Without Borders
- 2007-2011 **Project Architect, Stantec**, Washington DC  
 Sustainable higher education buildings and campus planning.
- Selected Projects: New Science Center for Montgomery Community College at Rockville, Maryland: LEED Gold Certified and nominated for AIA DC Award; George Mason University, Fairfax, VA: New student dormitory buildings; Tidewater Community College, VA: New Science Building with Teaching Labs; Philadelphia Community College: New Students Center and Library; Howard University, Washington DC: Science Teaching Labs
- 2005-2007 **Project Architect, BellArchitects**, Washington DC  
 Adaptive re-use, conservation, and institutional projects.
- Selected Projects: A Youth Correctional Facility at Oak Hill, MD for the Washington DC government; Federal Correctional Institution at Sheridan, OR; Restoration of Old Naval Hospital, Washington DC; Renovations and upgrades for compliance with building code and accessibility guidelines to apartment complexes in Maryland and Washington DC.
- 2003 **Associate Architect, Ranjit Sinh Associates**, Mumbai, India  
 New single-family bungalows around the Mumbai metropolitan area.
- 2001-2003 **Intern Architect, Ved Segan Associates**, Mumbai, India  
 Adaptive re-use projects, new houses, residential interiors, renovations and upgrades to performing arts theaters, and museums.

## SELECTED MEDIA COVERAGE

- 2020 Paniagua, T. (April 10, 2020). Businesses adapt to the pandemic, help for displaced workers. *Arizona 360, PBS 6, Arizona Public Media (AZPM)*. <https://playpbs.azpm.org/video/businesses-adapt-to-the-pandemic-help-for-displaced-workers-9rq6pe/>
- 2020 Sternberg, E.M. and Engineer, A. (March 23, 2021). Is COVID-19 making you stay at home? Turn your home into a healing space. *UA News*. <https://uanews.arizona.edu/story/covid19-making-you-stay-home-turn-your-home-healing-space>
- 2017 Mace, M. (December 22, 2017). UA professor/Engineer focuses on architecture's impact on humans. *Arizona Daily Star*. [http://tucson.com/news/university-of-arizona-professor-engineer-focuses-on-architecture-s-impact/article\\_a00f5ed5-9c4d-5e50-8145-0e3aa1ed2736.html](http://tucson.com/news/university-of-arizona-professor-engineer-focuses-on-architecture-s-impact/article_a00f5ed5-9c4d-5e50-8145-0e3aa1ed2736.html)
- 2017 Pigott, S. (December 4, 2017). UA architect aims to build a better world. *Lo Que Pasa*. <https://uaatwork.arizona.edu/lqp/ua-architect-aims-build-better-world>
- 2017 Dalton, M. (November 14, 2017). 7 inspiring solutions for disaster relief housing. *Dwell*. <https://www.dwell.com/article/7-inspiring-solutions-for-disaster-relief-housing-c2ec6783>
- 2016 McKnight, J. (April 14, 2016). Architects For Society designs low-cost hexagonal shelter for refugees. *Dezeen*. <http://www.dezeen.com/2016/04/14/architects-for-society-low-cost-hexagonal-shelter-housing-refugees-crisis-humanitarian-architecture/>
- 2016 Peters, A. and Cole, J. (2016, November 21). The future of neighborhoods: Five projects that show how we'll live. *Fast Company*. <https://www.fastcoexist.com/3065412/fast-cities/the-future-of-neighborhoods-five-projects-that-show-how-well-live>
- 2016 Millette, M. (2016, July 15). Can design offer solutions for the refugee crisis? *2016 Core77 Conference*. <http://www.core77.com/posts/54596/Can-Design-Offer-Solutions-for-the-Refugee-Crisis?platform=hootsuite>

## MEMBERSHIPS

- 2015-present Environmental Design Research Association (EDRA)
- 2008-present U.S. Green Building Council
- 2017-2019 National Council of Architectural Registration Boards (NCARB)
- 2005-2018 Council of Architecture, India