

Sandra Maria Bernal Cordova, Ph.D., HSIF, LEED GA

sbernal@arizona.edu

Curriculum Vitae

CURRENT AND PAST POSITIONS

2018 to present	Lecturer at the School of Architecture, College of Architecture, Planning and Landscape Architecture at University of Arizona
2020 to present	Instructional Designer and Online Course Developer at Religious Studies and Classics, College of Humanities, University of Arizona.
2014-2018	Graduate Teacher Associate in Sustainable Cities and Societies; Art and the Classical Ideal; and Art History of the Cinema at U of A
2015-2018	Guest lecturer at Sustainable Building Performance PCC Community Campus and Master of Science/ CAPLA Regional Studio 601

EDUCATION

2018	Ph.D. Arid Lands Resource Science, University of Arizona
2018	Certificate in College Teaching, University of Arizona
2007	B.A. in Architecture, Universidad Nacional Autónoma de México

AWARDS AND HONORS

2020	USGBC September Shero, Women in Green.
2020	University of Arizona Hispanic Serving Institution (HIS) Fellow
2017 & 2019	Volunteer of the Year, US Green Building Council Arizona
2017	Person of the Year, US Green Building Council Arizona
2015	Meritorious Award, Arid Lands Resource Science, University of Arizona
2014	Meritorious Award, Arid Lands Resource Science, University of Arizona
2007	Meritorious Award, the Best Thesis of the Year. B. A. Architecture, Universidad Nacional Autónoma de Mexico

PEER-REVIEWED PUBLICATIONS

2020	Bernal, S., Engineer, A., and Chalfoun, N. Implications of Natural and Mechanical Ventilation in the Exposure to Dust in Housing: Case of Study in Tucson, Arizona, US. <i>Vivienda y Comunidades Sustentables</i> . 4 (7) 77-91 ISSN: 2594-0198
2020	Crosson, C., and Bernal, S. "The Citizen-Architect: Collaborative Solutions between the Public and Profession for Long Term Design Performance Success"
2019	Engineer, A., and Bernal, S., Co-Pi, 25% contribution, 2019, July, Towards a human-centered approach to art museum design. <i>The International Journal of Architectonic, Spatial, and Environmental Design</i> , 13(2),1-12.
2018	Bernal, S., Author, 2018, August, Socially Constructed Narratives for Exploring the Impacts of Air Pollutant Infiltration in Built Environments. <i>ProQuest Dissertations & Theses Global</i> . (2128028111).
2014	Bernal, S., Author, 2014, July. Participatory Housing Adaptive Design To Contribute A Solution Of The Harmful Effects Of Dust Indoor. <i>The Macrotheme Review A multidisciplinary journal of global macro trends</i> , 3 (7).

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CONFERENCE PROCEEDINGS

- 2021(accepted) Bernal, S., Murrieta,J, and Gaxiola, I,. Intentional and Unintentional Performance: Analyzing the Validity and Agency of Ancient Environmental Design on Contemporary Architecture Advancement. ARCC, 2021.
- 2020 Alhabib, G., Engineer, A., Ida, A., and Bernal, S. Passive Strategies for Reducing the Impact of Outdoor Air Pollutants on Indoor Air Quality: A Combination of CAM Plants and Hydrogel membranes. International Society of Indoor Air Quality & Climate.

GRANTS

- 2020 CAPLA (UA) – Pima County – Mrs Green’s World small grant for the design, implementation and evaluation of Employee Engagementt Program THRIVE- Sustainable Action Plan for County Operations.
- 2020 Local First Arizona-CAPLA (UA) research and training small grant. State of Arizona Dept of Administration and DOE Green Fund.
- 2017 10K for the Feasibility Study as a Finalist, Haury Challenge Grant 2017
- 2017 100,000 Strong in the Americas Grant, Sustainable Energy Exchange Program (PCC-USGBC-T2030D) Partners of the Americas, September 28th, 2017
- 2015 Travel Grant Alfred P. Sloan Foundation.
- 2014 Dissertation Improvement Grant Global Change, University of Arizona.
- 2012 to 2016 CONACyT International Doctoral Fellowship.

RECENT PRESENTATIONS

- 2020 Mano a Mano: Ejercicio virtual de Integracion y Rescate de Contenidos Academicos Usando el Modelo COIL. Intrnationalization Week UNIMINUTO, Colombia. December 1, 2020.
- 2020 Servicios de Energia y Habitabilidad y Comfort Termico. II Coloquio Internacional Virtual Pobreza Energetica y Cambio Climatico en la Region Transfronteriza de Mexico y Estados Unidos/ November 26th, 2021.
- 2020 Intercultural Communication and Learning in the Classroom. HIS and International webinar "Intercultural Communication and Learning in the Classroom" on October 28, 2020
- 2020 “Interculturalidad: Un Ejercicio Sistemático.” Seminario en la maestría en Comunicación Educativa o en Desarrollo y Cambio Social. Universidad UNIMINUTO, Colombia, October 16th, 2020.
- 2020 Women in Green: Mountain Region Sheroes Panel Discussion. Panelist and Shero with the opic of ‘purpose.’ USGBC Mountain Regions October 12th, 2020.
- 2020 Food production, Arizona, and the energy nexus: historical background from ancient Greece and Rome to today’s Food deserts dilemma. Rethinking Energy as Work Rather than Commodity, Book Bash. Spetember 2020.
- 2020 La Aventura de la Fotografia Cientifica, UNAM Tucson 2020. Consulate of Mexico in Tucson, September 2020.

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2020	Social Justice, Resilience and Disaster Planning. SCALE UP, Local First Arizona. July 2020.
2020	Farmers, Ranchers, and Gatherers of the Southwest: Arid Lands and the impacts of food production. UA Food Studies Summer Internship. June 2020.
2019	Engineer, A., and Sandra Bernal. Towards a human-centered approach to art museum design. Learning from volunteers' perceptions and experiences. Inclusive Museum Conference, Buenos Aires, Argentina. November 2019.
2019	Engineer, A., and Sandra Bernal, 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, June 2019.
2019	Engineer, A., and Sandra Bernal. Towards a human-centered approach to art museum design. Environmental Design Research Association (EDRA50), Brooklyn, NY. May 2019.
2019	Plenary Presenter: Sucar, Crockett, Bernal, Martinez, "Building Better Bridges" a collaborative panel: University of Arizona, INAOE, Peace Corps. The Consortium for North American Higher Education Collaboration (CONAHEC) and North American Center for Collaborative Development (NACCD) conferences, University of New Mexico, Las Cruces, NM, April 4, 2019
2019	Cultural Implications in Sustainable Solutions, Binational Symposium Shared Cultural Heritage SBS- México Initiatives, University of Arizona, Feb-March 2019

CERTIFICATIONS AND SKILLS

2020	Collaborative Online International Learning.
2020	Quality Matters (QM) Independent Applying QM Rubrics
2018	Leadership in Environmental and Energy Design (LEED) Green Associate, USGBC
2016	Learner-Centered Teaching OIA, UA
2016	Classroom Assessments Methods OIA, UA
2016	Teaching Online, OIA, UA
2015	USGBC ADVANCE Ambassador
2015	The Committee on Science and Technology/ UNCCD
2014	House Energy Doctor
2013	Environmental Hazard Identification and Management
2013, 17 & 2020	Human Subject Protection Training/ CITI

INVOLVEMENTS

2018 to present	US Green Building Council (USGBC): Board Member and Leadership in Environmental and Energy Design (LEED) Green Associate
2018 to 2019	Watershed Management Group: Development Committee and Docent
2015 to 2018	USGBC: ADVANCE Ambassador
2015 to present	Tucson 2030 District: Educational Taskforce

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2015 to 2018	US-Mexico Foundation: STEM Mentor
2014	House Energy Doctor: Energy analyst and Mentor
2013 to 2019	Fundación México: Board Member, Board Secretary and President (2018-2019)
2012 to Present	Consulate of Mexico in Tucson, Arizona: volunteer in cultural initiatives.
2010 to 2012	Imagine Greater Tucson: Hispanic Outreach Team member