

Biographical Sketch

Sonia R. Chao

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(a) Professional Preparation

A list of the individual's undergraduate and graduate education and postdoctoral training as indicated below:

University of Miami	Coral Gables	Architecture	B.Arch, 1983
Columbia University	New York	Architecture	M.S. Architecture- Building Design & Theory

(b) Appointments

Research Associate Professor, University of Miami, School of Architecture, Coral Gables, Florida. Spring 2017.

Research Assistant Professor, University of Miami, School of Architecture, Coral Gables, Florida, Spring 2004 – present.

Director, Center for Urban and Community Design, University of Miami, School of Architecture, Coral Gables, Florida, Summer 2006- present.

Visiting Professor, Instituto Tecnológico de Monterey- Queretaro, Mexico, Inter-sessions: 2009, 2007, 2006.

Director, Havana Initiative, The Seaside Institute, Seaside, Florida. 2002-04.

Lecturer (Full-time Faculty), University of Miami, School of Architecture, Coral Gables, Florida, Fall 2002 - Fall 2003.

Part-time Faculty, University of Miami, School of Architecture, Coral Gables, Florida, Fall 1998- Spring 2002.

Principal, Sonia R. Chao Architect, Miami, Florida. 1998 – present.

Grant Administrator, Dade Heritage Trust, Miami, Florida. Hurricane Recovery Grants for Historic Properties in South Dade. January 1993- December 1994.

Research Associate and Managing Director, Center for Urban and Community Design, University of Miami, School of Architecture, Coral Gables, Florida, Fall 1992-Fall 1993.

Lecturer, University of Miami, School of Architecture, Venice Program, Venice, Italy, Spring 1988.

(c) Products [*this section may be titled **Publications** if only publications are listed*]

1. S. Chao, J. Correa, S. Fett, A. Montero, G. Sanchez-Hugalde, D. Smith, M. Zabala. *Haiti: Developing Sustainable Traditions & Innovations in Architecture and Urbanism for the Region*,

- Towns and the Rural Villages of Akayè (Arcahaie)*. University of Miami, Center for Urban & Community Design. 2016. Web. Jan. 2016. <http://arc.miami.edu/community/center-for-urban-community-design>
2. S. Chao, J. Correa, S. Fett, A. Montero, G. Sanchez-Hugalde, D. Smith, M. Zabala. *Haiti: Developing Sustainable Traditions & Innovations in Architecture and Urbanism for the Region, Towns and the Rural Villages of Akayè (Arcahaie)*. 2015. Print.
 3. Correa, Jaime, Chao, Sonia, Bachin, Robin. *Design Guidelines (for Miami Dade County Housing Finance Authority Projects)*. University of Miami Center for Urban & Community Design. 2014. <http://hfamiami.com/wp-content/uploads/2014/06/ADRAC-GUIDELINES>
 4. S. Chao, J. Correa, J. Hernandez, J. Hochstim, B. Matkov, E. Plater-Zyberk, G. Sanchez-Hugalde, A. Shulman. *Under the Sun Traditions and Innovation in Sustainable Architecture and Urbanism in the Sub-tropics*. University of Florida Press. 2014. Print.
 5. S. Chao. Chapter: *Sustainable Architecture*, Miami-Dade County Urban Design Handbook. Miami-Dade County Planning. Miami, FL. Print. 2006

Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of 10 will be used in the review of the proposal. [*Unpublished documents submitted/accepted for publication are acceptable and should include likely date of publication*]

Citation format:

Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and URL or other Persistent Identifier.

(d) Synergistic Activities

A list of up to **five examples** that demonstrate the broader impact of the individual's professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies, and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in science, mathematics, engineering and technology; and service to the scientific and engineering community outside of the individual's immediate organization.

1. **Research Grants** (as Principal Investigator or Co-Principal Investigator)

National Science Foundation (NSF) CRISP October, 2016. *Collaborative Research: A human-centered computational framework for urban and community design of resilient coastal cities*. Co-Principal Investigator. Collaborators: UM: Landolf Rhode-Barbarigos (PI), University of Colorado,

Wangda Zuo; Virginia Tech: Walid Saad and Anamaria Bukvic) Grant period: January 2017-December 2018.

The W.K. Kellogg Foundation *Haiti: Developing Sustainable Traditions & Innovations in Architecture and Urbanism for the Region, Towns and the Rural Villages of Akayè (Arcahaie) Learning from the Past. Forging the Future. Empowering the Population.* (2013-2016) Principal Investigator.

The Barr Foundation. *Haiti: Developing Sustainable Traditions & Innovations in Architecture and Urbanism for the Region, Towns and the Rural Villages of Akayè (Arcahaie) Learning from the Past. Forging the Future. Empowering the Population.* (2013-2015) Principal Investigator.

Miami Dade Housing Finance Authority. *Design Guidelines for Affordable Housing in Historic Neighborhoods.* (2013-2016). Co-Principal Investigator. P.I Asst. Vice-Provost Dr. Robin Bachin.

The Jesse Ball duPont Religious, Charitable and Educational Fund. Miami.; South Florida Affordable Housing Initiative (Charrettes and Masterplans for Opa-Locka, Allapattah and Overtown). (2012-2015). Co-Principal Investigator. P.I Asst. Vice-Provost Dr. Robin Bachin.

National Endowment for the Arts (N.E.A.) *Under the Sun: Sustainable Innovation + Traditions, DESIGN: Access to Excellence Award.* Washington, D.C. (2009-2012). Principal Investigator

The J. M. Kaplan Fund, (Four awards: 2002-2012) *Havana Initiative- Related Research: Havana: the evolution of urban form and codes; Preservation-minded Codes: Case Studies: Historic Center and El Vedado Neighborhoods; Sustainable Architecture at Mid-Century in Florida and Cuba and the Resulting Cross-pollination.* Presented at: Florida Trust for Historic Preservation (2004, 2013, 2014, 2015); Congress for the New Urbanism (2004, 2012); Institute for Classical Architecture and Art (2012, 2013). Principal Investigator.

2. Innovation in Teaching and Training

Chair and Speaker. High School Outreach. *In the Wake of Climate Changes- Are my family and I ready?* Resilient Neighborhoods & Net-Zero Housing Community Workshop, Cutler Bay High School Environmental Magnet Program, Cutler Bay, Fl. November 2015.

Charrette Leader and Organizing Committee. *Building a Resilient South Florida - High School Charrette: Dialogues on the new urban agenda; helping pave the road to U.N. Habitat III,* Partners: The Southeast Regional Office of the U.S. Department of Housing & Urban Development, and AARP Foundation. Participating high schools: BIOTECH (Richmond Heights), MAST Academy (Key Biscayne), Hialeah Gardens (Hialeah), Miami Coral Park (Coral Gardens/West Miami), South Dade (Homestead). June, 2016

Supervisor. *CUCD Preservation and Resiliency Internships,* in collaboration with the Division of Historic Preservation, City of Miami Beach (Fall 2015 and Spring 2016) and the Office of Resiliency, Miami-Dade County, (Spring 2016).

NCARB Authorized Internship Supervisor. - *Intern Development Program (NCARB- IDP) Supervisor for UM SoA Center for Urban & Community Design.* Supervision over CUCD affiliated graduate research assistants, collaborating on community outreach projects; credits towards the Intern Development Program, which is required prior to professional registration. National Council of Architectural Registration Board designation. Fall 2012 – present.

Committee Chair. *UM SoA Inaugural U-SERVE Initiative-* School-wide Day of Service and Learning. Historic Resources Digital Documentation- East Little Havana, School of Architecture, University of Miami, Coral Gables Campus. Spring 2015.

3. Contributions to the Science of Learning/ Interdisciplinary Collaborations

Chair and White Paper Contributor. *Resilient Miami Initiative.* Interdisciplinary ad hoc faculty group from University of Miami (Architecture, Center for Urban & Community Design, Communication, Engineering, Geography, Geology, RSMAS [Department of Atmospheric Sciences, Cooperative Institute for Marine & Atmospheric Studies, Center for Computational Science Climate and Environmental Hazards Program], and the Center for Computational Sciences), Florida International University (Wetlands Ecosystem Research Lab, S.E. Environmental Research Center, Department of Biological Sciences, School of Environment, Arts and Society) and Florida Atlantic University (Architecture, Center for Environmental Studies), focused on the resiliency of historic neighborhoods in Southeast Florida. With guidance and collaboration from Assistant Provost Karin Scarpinato. December, 2015- May 2016.

Faculty Committee Member (Invited). The University of Miami Sustainability Institute- Concept Paper, December, 2015. (Under review. UM College of Engineering, College of Arts & Sciences, RSMAS, School of Architecture. (Chairs: Ben Kirtman, Helena Solo- Gabriele)

Member. University of Miami Ad hoc CUBA Research Group, (Chair: L. Manzor). Fall 2015-present.

4. Development/Refinement of Research Tools

Florida Climate Institute (FCI), Executive Board Member, Spring 2017- present. Statewide collective of academics; collaborates directly with government administrators and the Southeast Florida Regional Climate Change Compact, by sharing research on the impact of climate variability, climate change, and sea level rise on the economy, ecosystems, and human-built systems.

5. Community Engagement and Symposia

Guest Participant. Keeping Current: A Sea-Level Rise Challenge for Greater Miami, University Research Summit. The Van Allen Institute, University of Miami Shalala Activities Center, November, 2017.

Panelist. Resilient Design and the Built Environment, The Wexford Innovation Summit, University of Miami, Rosenstiel School of Marine and Atmospheric Sciences, October 2017.

Presenter and Mini-charrette Co-leader. *Redesigning for Resilience: A Case Study Workshop Exploring Possibilities*. Workshop Organizer: Nancy Schneider, Institute for Sustainable Communities. National Adaptation Forum. St. Paul, MN. In collaboration with Resiliency officers from Miami-Dade, Broward and Hollywood, Fl. May, 2017

Panelist. *Urbanism 3.0, Companies vs. Climate Change-- The B2B Climate Solutions- US Green Building Council (USGBC)*, event. December, 2016.

Charrette Leader and Organizing Committee. Resilient Re-design III, Southeast Florida Regional Climate Change Compact and Institute for Sustainable Communities. With participation of Miami-Dade, Monroe and City of Miami staff from Planning & Zoning, Water Management, Resiliency Officers, in addition to scientists, planners, architects, and FIU, FAU and UM SoA faculty and students. Focus Areas: Arch Creek Basin, Shorecrest, Islamorada. November, 2016.

Guest Lecturer. *South Florida Intersection- Sea Level Rise and Historic Preservation; Flamingo Park, Case Study*. Harvard Graduate School of Design, Office for Urbanization, Miami Beach, FL. February, 2016.

Local Expert/Consultant. Resilience Advisory Services, Urban Land Institute Advisory Service Program, Topic: Miami-Dade County on Arch Creek Basin Resiliency and Climate Change Impacts. Interview, May, 2016, Consultations recorded in report, June, 2016.

Organizer and Speaker. "In the Wake of Climate Changes- Are my family and I ready?" Resilient Neighborhoods & Net-Zero Housing Community Workshop, Cutler Bay High School Environmental Magnet Program, Cutler Bay, Fl. November 2015.

Session Organizing Committee & Session Moderator. Hispaniola: Birthplace of the Latin American City, Congress for the New Urbanism, West Palm Beach, Fl. May, 2012

Session Organizing Committee, Presenter & Session Moderator. Havana: Paradigm of a Caribbean City, Congress for the New Urbanism, West Palm Beach, Fl. May, 2012

Co-Chairperson (with Becky Matkov / Dade Heritage Trust Executive Director) & Lecturer. Historic Preservation: a green alternative; 1 day symposium, in collaboration with Dade Heritage Trust and AIA Miami. University of Miami School of Architecture. Coral Gables, Fl. March, 2007.

Chairperson, Exhibit Curator & Lecturer. Under the Sun: Sustainable Innovations & Traditions, 2 ½ day symposium in collaboration with the University of Miami Law School's Center for Ethics & Public Service, U.S Green Building Council- South Florida Chapter and American Institute of Architects (AIA) Miami Chapter. University of Miami, School of Architecture. Connected to 3 credit elective course: Under the Sun Sustainable Traditions and Innovations. Faculty: Chao. Coral Gables, Fl. Symposium: January 2007 and Course: Spring, 2007.