# CURRICULUM VITAE

### Shih-Kai Huang, Ph.D

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## **EDUCATION**

Ph.D., Urban and Regional Science, Texas A&M University, TX. 2014.

#### Graduate Certificate in Environmental Hazard Management

Dissertation Topic: Households' Evacuation Decision in Response to Hurricanes Katrina And Rita. Specialization: Risk Perception, Risk Communication, Warning Response, Hurricane Evacuation

MS, Geotechnical Engineering, National Cheng Kung University, Taiwan. 2005. Master Thesis Topic: Research on the Segmentation of Liquefaction Potential in Township. Specialization: Seismic Hazard, Disaster Mitigation, Deep excavation and Building Protection

BS, Urban Planning, National Cheng Kung University, Taiwan. 2002.
Bachelor Thesis Topic: A Case Study of the Comprehensive Plan for ZuoYing HSR Station Special District.

Specialization: Community Development, Post-Disaster Recovery

# **PROFESSIONAL EXPERIENCE**

#### 2015-present. Assistant Professor, Department of Emergency Management, Jacksonville State University.

Course Taught:

- > EM 530, Research Methods (Fall 2015-present),
- > EM 853, Research Design (Upcoming),
- > EM 855, Advanced Data Analysis (Upcoming),
- > EM 862, Cost-Benefit Analysis (Upcoming).

#### 2014-2015. Research Associate, Department of Urban Design and Planning, University of Washington.

NSF Collaborative Research: Modeling, Display, and Understanding Uncertainty in Simulations for Policy Decision Making.

# **2009-2014. Research Assistant,** Hazard Reduction & Recovery Center, Dept. of Landscape Architecture and Urban Planning, TAMU.

- > NSF Community Risk Management of Hurricane and Tsunami Surge Hazards,
- NSF Agent-based Modeling for Planning Emergency Response to Contamination Emergencies in Water Utilities,
- > NSF Immediate Behavioral Response to Earthquakes in New Zealand and Japan,
- > NSF Persistent Volcanic Crises in the USA: From Precursors to Resilience,
- USACE Behavioral Study, Valley Hurricane Evacuation Study, Willacy, Cameron, and Hidalgo Counties, Texas,
- > TAMU/China Influenza Emergency Response Collaboration Project.

#### 2007-2008. Project Planner, Dept. of Urban Development, Taipei City Government, Taiwan.

- > TPE City Project: Arcade Renewal and Leveling (Head of a subproject),
- > TPE City Project: Administration of Building Safety.

# **2006-2007. Research Assistant,** Dept. of Land Management and Development, Chang Jung Christian University, Taiwan.

- > NSC Post-921 Earthquake Community Recovery Project
- > NSC Cooperation between GOs and NGOs at Post-disaster Recovery Project

> TNA City Project: Management of Fire Emergency on Historic Building

**2005-2006.** Facility Officer, Real Estate Plan and Management Division, Ministry of National Defense, Taiwan.

TW National Project: Urban Renewal Plan of Nationwide Aged Military Communities (Head of a subproject)

## **PUBLICATIONS**

# A. Peer-reviewed journal articles: (Published)

- Huang, Shih-Kai, Lindell, Michael K., Prater, Carla S., Wu, Hao-Che, and Siebeneck, Laura K. (2012). Household Evacuation Decision Making in Response to Hurricane Ike. *Natural Hazards Review*, 13(4): 283-296.
- Siebeneck, Laura K., Lindell, Michael K., Prater, Carla S., Wu, Hao-Che, and Huang, Shih-Kai. (2012). Evacuees' Reentry Concerns and Experiences in the Aftermath of Hurricane Ike. *Natural Hazards*, 65(3): 2267-2286.
- Lin, Chih-Chun, Siebeneck, Laura K., Lindell, Michael K., Prater, Carla S., Wu, Hao-Che, and Huang, Shih-Kai. (2014). Evacuees' Information Sources and Reentry Decision Making in the Aftermath of Hurricane Ike. *Natural Hazards*, 70(1): 865-882.
- 4. Lindell, Michael K., Gregg, Christopher E., Prater, Carla S., **Huang, Shih-Kai**, Wu, Hao-Che, and Apatu, Emma J.I. (2015). Households' Immediate Responses to the 2009 Samoa Earthquake and Tsunami. *International Journal of Disaster Risk Reduction*, 12: 328-340.

#### (Accepted)

- Lindell, Michael K., Prater, Carla S., Wu, Hao-Che, Huang, Shih-Kai, Johnston, David M., Becker, Julia S., and Shiroshita, Hideyuki. (In Press). Immediate Behavioral Responses to Earthquakes in Christchurch New Zealand and Hitachi Japan. *Disasters* (Submitted by Apr. 22, 2013; Accepted by Sept. 30, 2013). Available at: <u>http://onlinelibrary.wiley.com/doi/10.1111/disa.12133/pdf</u>
- Huang, Shih-Kai, Lindell, Michael K., and Prater, Carla S. (In Press). Who Leaves and Who Stays? A Review and Statistical Meta-Analysis of Hurricane Evacuation Studies. *Environment and Behavior* (Submitted by July 20, 2014; Accepted by Aug. 30, 2014).
  Available at: http://ach.sagapub.com/content/oarlu/2015/05/12/0012016515578485 full.pdf.html

Available at: http://eab.sagepub.com/content/early/2015/05/13/0013916515578485.full.pdf+html

 Lindell, Michael K. Huang, Shih-Kai, Wei, Hung-Lung, and Samuelson, Charles D. (In Press). Perceptions and expected immediate reactions to tornado warning polygons." *Natural Hazards* (Submitted by Jul. 22, 2015; Accepted by Sept. 17, 2015).

Available at: http://link.springer.com/article/10.1007/s11069-015-1990-5

- Lindell, Michael K., Mumpower, Jerel L., Huang, Shih-Kai, Prater, Carla S., Wu, Hao-Che, Samuelson, Charles D., and Wei, Hung-Lung. (In Press). Perceptions of Exposure Paths and Stakeholder Characteristics for a Water Contamination Emergency. *Environmental Health Insights* (Submitted by Aug. 25, 2015; Accepted by Sept. 23, 2015).
- Lindell, Michael K., Mumpower, Jerel L., Huang, Shih-Kai, Prater, Carla S., Wu, Hao-Che, Samuelson, Charles D., and Wei, Hung-Lung. (In Press). Perceptions of Protective Actions for a Water Contamination Emergency. *Journal of Risk Research* (Accepted by Nov. 9, 2015).

#### (Under Review or Awaiting Revision and Resubmission)

- 10. **Huang, Shih-Kai**, Lindell, Michael K., and Prater, Carla S. (Reviewing). Toward a Comprehensive Model of Hurricane Evacuation Decision: An Empirical study of Hurricanes Katrina and Rita. *Natural Hazards Review* (Under Review).
- Lindell, Michael K., Huang, Shih-Kai, and Prater, Carla S. (Reviewing). Residents' Responses to the May 1-4 2010 Boston Water Contamination Incident. *International Journal of Mass Emergencies and Disasters* (Under Review).

- 12. Park, Yun-Mi, **Huang, Shih-Kai**, and Newman, Galen D. (Reviewing). A Statistical Meta-Analysis of New Urbanism Based Design Components on Housing Prices. *Journal of planning literature* (Under Review)
- 13. Wei, Jiuchang, Wang, Fei, **Huang, Shih-Kai**, and Lindell, Michael K. (R&R). Perception of Risk and Public Security: A Case Study of H7N9 Emergency. *Risk Analysis* (Revise and Resubmission).
- 14. Wang, Fei, Wei, Jiuchang, Lindell, Michael K., and **Huang, Shih-Kai**. (R&R). Perception and Expected Responses to H7N9 Emergency in China. *A. J. Preventive Med*. (Revise and Resubmission).

#### **B.** Technical Reports:

- Lindell, Michael K., Ge, Yue, Huang, Shih-Kai, Prater, Carla S., Wu, Hao-Che, and Wei, Hung-Lung. (2013). *Behavioral Study, Valley Hurricane Evacuation Study, Willacy, Cameron, and Hidalgo Counties, Texas.* Texas A&M University Hazard Reduction & Recovery Center, College Station TX.
- Lindell, Michael K., Prater, Carla S., Wu, Hao-Che, and Huang, Shih-Kai. (2010). Perceptions and Expected Responses to a Water Contamination Emergency. Texas A&M University Hazard Reduction & Recovery Center, College Station TX.
- Shao, Pei-Chun and Huang, Shih-Kai. (2009). Cooperative mechanism between public and private sectors for post-disaster community reconstruction. National Science Council Project NSC 95-2625 -Z-309-001- and NSC 95-2625-Z-309-003-. Taipei, Taiwan.

#### C. Book Chapter:

- 1. Wu, Hao-Che, Lindell, Michael K., Prater, Carla S., and **Huang, Shih-Kai**. (2013). Logistics of hurricane evacuation in Hurricane Ike. In *Logistics: Perspectives, Approaches and Challenges*, edited by J. Cheung and H. Song. NY: Nova Science Publishers.
- 2. Wu, Hao-Che, **Huang, Shih-Kai,** and Lindell, Michael K. (In press). Evacuation Planning. Chapter 11 in *The Handbook of Planning for Disaster Resilience*, edited by Shannon Van Zandt and Walter Gillis Peacock. TX: HRRC TAMU.

#### **D.** Other Articles:

- 1. **Huang, Shih-Kai** and Lindell, Michael K. (2015). *Two-Decade Development of Protective Action Decision Model*. Department of Urban Design and Planning, University of Washington. Seattle WA. (Working paper).
- 2. Yu, Chin-Hsien, **Huang, Shih-Kai**, McCarl, Bruce A., and Shaw, W. Douglass. (2015). *Risk Adjustment for Stakeholder Economic Choices in Response to a Typhoon*. Department of Agricultural Economics, Texas A&M University. College Station TX. (Working paper).
- 3. **Huang, Shih-Kai**, Ge, Yue, Lindell, Michael K., and Prater, Carla S. (2015). *The inequality of hurricane evacuation logistic between urban and rural residents*. Texas A&M University Hazard Reduction & Recovery Center, College Station TX. (Working paper).
- 4. Ge, Yue, Lindell, Michael K., **Huang, Shih-Kai**, and Prater, Carla S. (2014). *Vulnerability and Hurricane Evacuation Expectation in the Lower Rio Grande Valley*. Department of Emergency Management, North Dakota State University. Fargo, ND. (Working paper).
- 5. Van Zandt, Shannon S., and **Huang, Shih-Kai**. (2012). *Does Spatial Inequality form a Gap in Housing Opportunity in the United States?* Texas A&M University Hazard Reduction & Recovery Center, College Station TX. (Working book chapter).

### **PRESENTATIONS**

#### A. Conference Posters:

- 1. **Huang, S-K.**, Lindell, M.K., and Prater, C.S. *Perceptions and Immediate Reactions to Tornado Warning Polygons*. 40<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 19-23, 2015.
- Huang, S-K., Lindell, M.K., and Prater, C.S. *Statistical Review of Hurricane Evacuation in Past 25 Years*. 39<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, June 22-25, 2014.

- 3. **Huang, S-K.**, Lindell, M.K., and Prater, C.S. *A Statistic Meta-Analysis of Households' Hurricane Evacuation Decisions*. Planning for Disaster Resilience Symposium, College Station, Texas, April 5-6, 2014.
- Huang, S-K., Lindell, M.K., Prater, C.S., Ge, Y., and Wu, H-T. *Households' Hurricane Evacuation* Behaviors at Rio Grande Valley. 38<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 14-18, 2013.
- Huang, S-K., Lindell, M.K., Prater, C.S., Wu, H-T., Johnston, D., and Becker, J. *Immediate Behavioral Response to the New Zealand Earthquake*. The Association of Collegiate Schools of Planning (ACSP) 53<sup>rd</sup> Annual Conference, Cincinnati, 2012.
- 6. **Huang, S-K.**, Lindell, M.K., Prater, C.S., Wu, H-T., and Shiroshita, H. *Immediate Behavioral Response* to the Tohoku Earthquake. 37<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 13-17, 2012.
- Huang, S-K., Lindell, M.K., Mumpower, J.L., and Wu, H-T. *Residents' Protective Actions in Boston Water Contamination Emergency*. The Association of Collegiate Schools of Planning (ACSP) 52<sup>nd</sup> Annual Conference, Salt Lake City, Oct 13-16, 2011.
- 8. **Huang, S-K.**, Lindell, M.K., Mumpower, J.L., and Wu, H-T. *Risk Perceptions and Protective Actions in a Water Contamination Emergency*. 36<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 9-13, 2011.
- 9. Huang, S-K., Lindell, M.K., Prater, C.S., and Wu, H-T. *GIS Application on Hurricane Evacuation Study during Hurricanes Rita and Ike*. GIS Day, College Station, Texas, Nov 16, 2010.
- Huang, S-K., Lindell, M.K., and Prater, C.S. Household Evacuation Decision Making in Response to Hurricane Ike. 35<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 4-10, 2010.
- **B.** Conference Presentations:
- 1. **Huang, S-K.**, Wu, H-T., Lindell, M.K., and Samuelson, C.D. (Forthcoming). *Individuals' Responses to Tornado Warning Polygons*. 3<sup>rd</sup> ISA Forum of Sociology, Vienna, Austria, July 10-14, 2016.
- 2. Huang, S-K, Ge, Y., and Lindell, M.K. (Forthcoming). *The Inequalities on Hurricane Evacuation Logistic Behaviors between General and Texas Colonia Households*. The 2016 National Evacuation Conference, March 1-3, 2016.
- 3. Park, Yun-Mi and **Huang, S-K**. *The impacts of neighborhood design on housing price: Meta-analysis by differently defined neighborhoods*. The Association of Collegiate Schools of Planning (ACSP) 56<sup>th</sup> Annual Conference, Houston, Oct. 22-25, 2015.
- 4. **Huang, S-K.**, Lindell, M.K., and Prater, C.S. *Perceptions of Protective Actions and Response to a Water Contamination Emergency*. 40<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 19-23, 2015.
- 5. Huang, S-K., Lindell, M.K., and Prater, C.S. *Residents' Responses to the May 1-4 2010 Boston Water Contamination Incident.* XVIII ISA World Congress of Sociology, Yokohama, Japan, July 13-19, 2014.
- Huang, S-K., Lindell, M.K., and Prater, C.S. *Households' Evacuation Behaviors and Their Response* to Hurricanes Katrina And Rita. 39<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, June 22-25, 2014.
- Huang, S-K., Lindell, M.K., and Prater, C.S. What Affect Households' Hurricane Evacuation Decisions? Review of 20 Years of Hurricane Evacuation Studies. 38<sup>th</sup> Natural Hazards Research and Applications Workshop, Boulder, Colorado, July 14-18, 2013.
- 8. **Huang, S-K.**, Shao, P-C., and Chen, Y.H. *Research on Community Reconstruction Through Land Readjustment in the Wake of Extensive Earthquake Disaster* (in Chinese), Taiwan Institute of Urban Planning Annual Seminar. Taipei, Taiwan, Dec 2006.
- 9. Shao, P-C., **Huang, S-K**. *The Disaster Management Plan for the Vulnerable in Taiwan*. 31<sup>st</sup> Annual Hazards Research and Applications Workshop. Boulder, Colorado, 2006.
- **C. Invited Presentations:**
- 1. **Huang, S-K.** 2014. *Risk Communication: Residents' Decision Making in Response to a Warning.* Central Police University, Taiwan for the Disaster Management Conference.

# **AWARDS AND HONORS**

2012-2014: (Two years): The 2012 Taiwan Studying Abroad Scholarship

(this scholarship is a Research Proposal Award in Emergency Management, 2012).

2009-2014: Departmental Graduate Assistantship, Dept. of LAUP, TAMU.

2012: Department Head Award (\$250) Travel Grant for the ACSP 53<sup>rd</sup> Annual Conference.

2012: Department Head Award (\$250) Travel Grant for the 37th Natural Hazard Workshop Annual

2011: Department Head Award (\$250) Travel Grant for the ACSP 52<sup>nd</sup> Annual Conference.

2011: Department Head Award (\$250) Travel Grant for the 36<sup>th</sup> Natural Hazard Workshop Annual

2002-2004 (four semesters): Departmental Scholarship for Top 10% GPA, Dept. of Civil Engineering, NCKU.

1998: Distinction and Scholarship, Top 5% university-wide on calculus grade, Calculus Achievement Test, NCKU.

## **SERVICES**

**Editorial Assistant,** *International Journal of Mass Emergencies and Disasters* (2013-2015). **Reviewer of a Scientific Journal:** 

International Journal of Mass Emergencies and Disasters (2013)

Risk Analysis (2014, 2015)

- Human and Ecological Risk Assessment (2014, 2015)
- Disasters (2014, 2015)

#### **Reviewer of a Conference Paper:**

International Association for China Planning (IACP) Conference (2014)