# Dr. Laura K. Siebeneck

University of North Texas
Emergency Management and Disaster Science
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## Education

PhD, University of Utah, 2010.

Major: Geography

MS, University of Utah, 2007.

Major: Geography

BS, Texas State University, 2005. Major: Physical Geography

# **Professional Positions**

# **Academic - Post-Secondary**

Associate Professor, University of North Texas, Department of Emergency Management and Disaster Science. (September 1, 2016 - Present).

Director of the Undergraduate Program, Emergency Administration and Planning, University of North Texas (2015 - Present).

Assistant Professor, University of North Texas, Public Administration. (2011 - 2016).

Lecturer, University of North Texas, Department of Public Administration. (2010 - 2011).

Research Assistant, University of Utah, Center for Natural and Technological Hazards. (2006-2010).

# **Professional Memberships**

Member, Association of American Geographers. (2007 - Present).

Member, Texas Division of Emergency Management State Hazard Mitigation Team. (2013 - 2015).

### **Awards and Honors**

Distinguished Researcher Award, UNT College of Health and Public Service. (2018).

Fellow, Enabling the Next Generation of Hazards and Disasters Researchers Fellowship Program, sponsored by the National Science Foundation. (2014 - 2016).

Professor of the Year, UNT Public Administration Student Association. (2014).

Outstanding Graduate Student Award. Department of Geography, University of Utah. (2010).

Jeanne X. Kasperson Student Paper Award. Association of American Geographers Hazards Specialty Group. (2008).

## **RESEARCH**

## **Published Intellectual Contributions**

### **Book Chapters**

Fuchs, S., Frazier, T., Siebeneck, L. K. (2018). Physical Vulnerability. *Vulnerability and Resilience to Natural Hazards* (pp. 32-52). Cambridge University Press.

### **Encyclopedia Article**

Siebeneck, L. K. (2010). Hurricanes, risk, and hazards. Encyclopedia of Geography.

### **Refereed Journal Articles**

- Olszewski, C., Siebeneck, L. K. (in press). Emergency Management Collaboration: A Review and New Collaboration Cycle. *Journal of Emergency Management*.
- Li, D., Cova, T. J., Dennison, P. E., Wan, N., Nguyen, Q. C., Siebeneck, L. K. (in press). Why do we need a national address point database to improve wildfire public safety in the US? *International Journal of Disaster Risk Reduction*.
- Siebeneck, L. K., Richardson, B. K. (2019). From Machu Picchu to Masaya Volcano: An Interdisciplinary Approach to Offering Study Abroad Courses on International Disasters and Crisis Communication. *International Journal of Mass Emergencies and Disasters*, 37(1), 44-56.
- Samuel, C., Siebeneck, L. K. (in press). Roles Revealed: An examination of the emergency managers adopted roles in hazard mitigation planning and strategy implementation. *International Journal of Disaster Risk Reduction.*
- Siebeneck, L. K., Schumann, R., Kuenanz, B.J. (2019). GIS Applications in Emergency Management: Infusing Geographic Literacy in the Classroom. *Journal of Emergency Management*, *17*(2), 119-135.
- Kendra, J., Siebeneck, L. K., Andrew, S. A. (2018). Disaster Movies in the Classroom: Pedagogical Value and Teaching Approaches. *International Journal of Mass Emergencies and Disasters*. *36*(3).
- Manandhar, R., Siebeneck, L. K. (2018). Return-Entry Risk Communication Challenges: Experience of Local Emergency Management Organizations following Superstorm Sandy. *International Journal of Mass Emergencies and Disasters*, *36*(2), 120-148.
- Cova, T., Dennison, P., Li, D., Drews, F., Siebeneck, L., Lindell, M. (2017). Warning triggers in environmental hazards: who should be warned to do what and when? *Risk Analysis*, *37*(4), 601-611.
- Nicoll, K., Cova, T. J., Siebeneck, L. K., Eric, M. (2016). Assessing "preparedness elevated": seismic risk perception and household adjustment in Salt Lake City, Utah. *Journal of Geography and Natural Hazards*, 6(168), 2167-0587.
- Andrew, S. A., Arlikatti, S., Siebeneck, L. K., Pongponrat, K., Jaikampan, K. (2016). Sources of Organizational Resiliency during the Thailand Floods of 2011: A Test of Bonding and

- Bridging Hypotheses. Disasters, 40(1), 65-84.
- Siebeneck, L. K. (2016). Examining Social, Physical, and Environmental Dimensions of Tornado Vulnerability in Texas. *Journal of Emergency Management*, *14*(2), 139-151.
- Siebeneck, L. K., Arlikatti, S., Andrew, S. A. (2015). Using Provincial Baseline Indicators to Model Geographic Variations of Disaster Resilience in Thailand. *Natural Hazards*, 79(2), 955-975.
- Drews, F. A., Siebeneck, L. K., Cova, T. (2015). Information Search and Decision Making in Computer-Based Wildfire Simulations. *Journal of Cognitive Engineering and Decision Making*, *9*(3), 229-240. http://dx.doi.org/10.1177/1555343415586478
- Drews, F. A., Musters, A., Siebeneck, L. K., Cova, T. J. (2014). Environmental factors that influence wildfire protective-action recommendations. *International Journal of Emergency Management*, *10*(2), 153. http://dx.doi.org/10.1504/ijem.2014.066187
- Richardson, B. K., Siebeneck, L. K., Shaunfield, S., Kaszynski, E. (2014). From "No Man's Land" to a "Stronger Community": Communitas as a Theoretical Framework for Successful Disaster Recovery. *International Journal of Mass Emergencies and Disasters*, 32(1), 194-210.
- Siebeneck, L. K., Cova, T. J. (2014). Risk Communication After Disaster: Re-entry Following the 2008 Cedar River Flood. *Natural Hazards Review*, *15*(2), 158-166.
- Lin, C.-C., Siebeneck, L. K., Lindell, M. K., Prater, C. S., Wu, H.-C., Huang, S.-K. (2014). Evacuees' information sources and reentry decision making in the aftermath of Hurricane Ike. *Natural Hazards*, 70(1), 865-882. http://dx.doi.org/10.1007/s11069-013-0853-1
- Cova, T., Theobald, D., Norman, J., Siebeneck, L. K. (2013). Mapping wildfire evacuation vulnerability in the western U.S. *GeoJournal*, 78(2), 278-285.
- Siebeneck, L. K., Lindell, M. K., Prater, C. S., Wu, H.-C., Huang, S.-K. (2013). Evacuees' reentry concerns and experiences in the aftermath of Hurricane Ike. *Natural Hazards*, *65*(3), 2267-2286. http://dx.doi.org/10.1007/s11069-012-0474-0
- Siebeneck, L. K., Cova, T. (2012). Spatial and Temporal Variation in Evacuee Risk Perception throughout the Evacuation and Return-Entry Process. *Risk Analysis*, *32*(9), 1468-1480.
- Huang, S.-K., Lindell, M. K., Prater, C. S., Wu, H.-C., Siebeneck, L. K. (2012). Household Evacuation Decision Making in Response to Hurricane Ike. *Natural Hazards Review, 13*(4), 283-296. http://dx.doi.org/10.1061/(asce)nh.1527-6996.0000074
- Medina, R., Siebeneck, L. K., Hepner, G. (2011). A Geographic Information Systems (GIS) Analysis of Spatiotemporal Patterns of Terrorist Incidents in Iraq 2004-2009. *Studies in Conflict & Terrorism*, 34, 962-882.
- Cova, T., Drews, F., Siebeneck, L. K., Musters, A. (2009). Protective actions in wildfires:evacuate or shelter-in-place? *Natural Hazards Review*, *10*(4), 151-162.
- Siebeneck, L. K., Medina, R., Hepner, G., Yamada, I. (2009). Spatial and temporal analyses of terrorist incidents in Iraq 2004-2006. *Studies in Conflict & Terrorism, 32*(7), 591-610.
- Siebeneck, L. K., Cova, T. (2008). An assessment of the return-entry process for Hurricane Rita 2005. *International Journal of Mass Emergencies and Disasters*, *26*(2), 91-111.

### **Technical Report**

- Siebeneck, L. K., Gaston, R., Byerly, A., Manandhar, R., Samuel, C. (2014). *Texas Tornado Hazard Analysis*.
- Siebeneck, L. K., Cova, T. J. (2008). Risk perception associated with the evacuation and return-entry process of the Cedar Rapids, Iowa flood.

### **Presentations Given**

- Ukkusuri, S. (Presenter), Siebeneck, L. K. (Other), Lee, S. (Other), Sundarum, S. (Other), Yabe, T. (Other), NSF CRISP Workshop, "Critical Transitions in the Resilience and Recovery of Interdependent Social and Physical Networks," NSF, Washington DC, United States of America. (December 5, 2018 December 6, 2018).
- Yabe, T. (Author & Presenter), Ukkusuri, S. (Author), Siebeneck, L. K. (Author), Lee, S. (Author), NSF CRISP Workshop, "Critical Transitions in the Resilience and Recovery of Interdependent Social and Physical Networks," NSF, Washington DC, United States of America. (December 4, 2018 - December 6, 2018).
- Siebeneck, L. K. (Author & Presenter), Ukkusuri, S. (Other), Lee, S. (Other), Kuenanz, B.-J. (Other), American Association of Geographers Annual Meeting, "Returning Home After Sandy: Experiences of New Jersey Residents Along the Shore," New Orleans, LA, United States of America. (April 10, 2018 April 14, 2018).
- Siebeneck, L. K. (Panelist), American Association of Geographers Annual Meeting, "Vulnerability and Resilience to Environmental Hazards," Boston MA, United States of America. (April 2017).
- Siebeneck, L. K. (Panelist), Emergency Management Higher Education Symposium, "Developing and Sustaining Bachelors Level Emergency Management Programs," Emmitsburg, MD, United States of America. (June 6, 2016 June 9, 2016).
- Siebeneck, L. K. (Presenter), American Association of Geographers Annual Meeting, "Returning After Disaster: Developing a Theory of Ending Protective Actions," San Francisco, CA, United States of America. (April 2016).
- Siebeneck, L. K. (Panelist), Bill Anderson Fund Student Council Workshop, "Time Management and Multiple Commitments," Bill Anderson Fund, Webinar, United States of America. (November 7, 2015).
- Siebeneck, L. K. (Leader), Natural Hazards Workshop, "GIS and Disasters Roundtable," Broomfield, CO, United States of America. (June 22, 2015 June 25, 2015).
- Siebeneck, L. K. (Presenter), American Association of Geographers Annual Meeting, "Returning after disaster: Issues, strategies, and future research directions.," United States of America. (April 2015).
- Siebeneck, L. K. (Discussant), American Association of Geographers Annual Meeting, "Jeanne X. Kasperson Student Presentation Awards Session.," American Association of Geographers Annual Meeting, Chicago, IL, United States of America. (April 2015).
- Siebeneck, L. K. (Presenter), Natural Hazards Workshop, "Accounting for observer bias in tornado risk and vulnerability assessments: The case of Texas tornadoes.," Broomfield, CO, United States of America. (June 22, 2014 June 25, 2014).
- Siebeneck, L. K. (Presenter), Simmons, K. (Author), Sutter, D. (Author), Association of American

- Geographers Annual Meeting, "Texas Twister: Creating plausible worse-case scenarios of tornado casualties." Tampa. FL. United States of America. (April 2014).
- Siebeneck, L. K. (Author & Presenter), Arlikatti, S. (Author), Andrew, S. A. (Author), Natural Hazards Workshop, "The development of disaster resilience indicators and modeling in Thailand.," Broomfield, CO, United States of America. (July 13, 2013 July 16, 2013).
- Siebeneck, L. K. (Author & Presenter), Arlikatti, S. (Author), Andrew, S. A. (Author), Pongporat, K. (Author), Jaikampan, K. (Author), Association of American Geographers Annual Meeting, "Cross comparison of disaster resilience in rural, suburban, and urban communities in Thailand.," Los Angeles, CA, United States of America. (April 2013).
- Andrew, S. A. (Author), Arlikatti, S. (Author & Presenter), Siebeneck, L. K. (Author), Association of American Geographers Annual Meeting, "Cross-Comparison of Disaster Resilience in Rural, Suburban, and Urban Communities in Thailand," Association of American Geographers, Los Angeles, United States of America. (April 11, 2013).
- Andrew, S. A. (Author), Arlikatti, S. (Author & Presenter), Siebeneck, L. K. (Author), 73rd Annual Meeting, Society for Applied Anthropology, "The 2011-2012 Floods in Thailand: An Examination of Organizational Response in Rural, Suburban, and Urban Communities," Society for Applied Anthropology, Denver, United States of America. (March 19, 2013 March 23, 2013).
- "Richardson, B.K.\*, Siebeneck, L.K., Shaunfield, S., and Kaszynski, B... I don't know what ya'll are gonna do but I'm gonna let our's in. Communitas as a theoretical framework for discussion recovery. Presented at the Southern States Communication Association Annual Conference. San Antonio, TX. April 2012 (2012).
- "Siebeneck, L.K. "One way out Many ways home: Returning after disaster". Presented at the FEMA Region VI Annual Hazard Mitigation Conference, Denton, TX. May 2, 2012. (2012).
- "Siebeneck, L.K Do I make myself clear? Warning messages and household response.

  Presented at the Association of American Geographers Annual Meeting, New York, NY, Feb 25, 2012. (2012).
- "Siebeneck, L.K. Returning after disasters: Current issues and future research directions.

  Presented at the National Evacuation Conference. New Orleans, LA. Feb 7-9, 2012. (2012).
- "Siebeneck, L.K. and Arlikatti, S.." Assessing Resilience Among Rural, Suburban, and Urban Communities Following the Thailand Floods. Presented at the International Research Committee on Disaster Researchers Meeting. Boulder, CO. July 17-18, 2012. (2012).
- "Siebeneck, L.K., Arlikatti, S., Andrew, S., and Jaikampan, K.." (2012).
- Andrew, S. A. (Author), Siebeneck, L. K. (Author), Arlikatti, S. (Coordinator/Organizer), International Research Committee on Disasters (IRCD) and Hazard Researchers Meeting, "Resiliency among Rural, Suburban and Urban Communities Following the 2011 Thailand Floods," International Research Committee on Disasters (IRCD), Broomfield, United States of America. (July 17, 2012 July 18, 2012).
- "Siebeneck, L.K. Exploring academia's role in assisting local communities with the hazard mitigation planning process. Invited presentation at the FEMA Region VI Annual Hazard Mitigation Conference, Denton, TX. May 4 and 5, 2011. (2011).
- "Siebeneck, LK.." Challenges getting back: Return issues following Hurricane Ike. Presented at the Association of American Geographers Annual Meeting, Seattle, WA, April 13, 2011

(2011).

- "Siebeneck, L.K. Challenges getting back: Risk communication issues following disaster events. Presented at the Association of American Geographers Annual Meeting, Washington D.C., April 16, 2010 (2010).
- "Siebeneck, L.K., Cova, T.J., Drews, F.A., and Musters, A. Evacuation and shelter-in-place in wildfires: The incident commander perspective. Invited presentation, 2010 Great Basin Incident Command Team Meetings, Reno, NV. April 6, 2010.." (2010).
- "Lindell, M.K., Prater, C.S., Siebeneck, L.K. and Cova, T.J. Hurricane Ike Reentry. Presented at the National Hurricane Conference, Austin, TX. March 2009.." (2009).
- "Siebeneck, L.K. and Cova, T.J. Current Research at the Center for Natural and Technological Hazards. Poster presented at the Natural Hazards Workshop, University of Colorado, Boulder, Colorado, July 2009.." (2009).
- "Siebeneck, L.K. and Cova, T.J. Using GIS to explore evacuee behavior before, during and after the 2008 Cedar Rapids Flood. Presented at the Association of American Geographers Annual Meeting, Las Vegas, Nevada. March, 2009.." (2009).
- "Cova, T.J., Siebeneck, L.K., Drews, F.A, Musters, A. Evacuation and shelter-in-place in wildfires: The incident commander perspective." Poster presented at the 2008 Pacific Fire Conference, San Diego California. December 2008.." (2008).
- "Siebeneck, L.K. and Cova, T.J. An assessment of the return-entry process for Hurricane Rita 2005. Presented at the Association of American Geographers Annual Meeting, Boston, MA April 2008.." (2008).
- "Siebeneck, L.K. and Cova, T.J. An assessment of the return-entry process for Hurricane Rita-2005. Presented at the Natural Hazards Workshop, University of Colorado, Boulder, Colorado. July 2007.." (2007).
- "Siebeneck (Chance), L.K. and Whittaker, E. Impact of Climate Change on Endangered Species in the Comal River. Texas State University, First Annual Geography Students Research Symposium: April 2004.." (2004).

## **Media Contributions**

### Radio

"Hurricane Harvey," CBS Radio Dallas KRLD 1080. (August 25, 2017).

### TV

"Research in EMDS at UNT" Chatting with Chumbler Series. March 2019.

"UNT Study Abroad in Nicaragua Visits Fire Station for Information Exchage," Noticias 12 - Nicaragua. (May 25, 2016).

#### Other

What Utah can learn from Hurricane Ike? Guest Column. The Daily Utah Chronicle. (2008).

# **Funded Contracts, Grants and Sponsored Research**

#### **Grant - Research**

- Siebeneck, L. K. "CRISP Supplement: Characterizing Patterns of Household Displacement and Returning Behavior in Extreme Events: The Hurricane Harvey Experience.," Sponsored by National Science Foundation, Federal, \$21,473.00. (October 2017 Present).
- Ukkusuri, S. (Principal), Sundaram, S. (Co-Principal), Lee, S. (Co-Principal), Siebeneck, L. (Co-Principal), "Critical Transitions in the Resilience and Recovery of Interdependent Social and Physical Networks. National Science Foundation . CRISP Type 2/Collaborative Research.," Sponsored by National Science Foundation, Federal, \$2,474,413.00. (January 1, 2017 Present).
- Andrew, S. A. (Co-Principal), Siebeneck, L. K. (Co-Principal), Arlikatti, S. (Principal), "Assessing Resiliency among Rural, Suburban, and Urban Communities Following the Thailand Floods of 2011," Sponsored by National Science Foundation, Federal, \$73,606.00. (2012 2013).
- Siebeneck, L. K. (Principal), "Tornado Hazard Analysis Mitigation Grant," Sponsored by Texas Department of Public Safety, State, \$60,000.00. (2013 2015).

# **Unfunded Contracts, Grants and Sponsored Research**

### Other

- Siebeneck, L. K. (Principal), "There's no place like home: The nature of risks associated with shelter emergence and returning after natural disasters," Sponsored by UNT RIG Award, \$5,987.00. (2013).
- Siebeneck, L. K. (Principal), "Quick Response Research Grant," Sponsored by Natural Hazards Center, University of Colorado, Boulder, CO, \$3,000.00. (2008).

### **Technical Report**

Andrew, S. A., Arlikatti, S., Siebeneck, L. K. (2014). *Assessing Resiliency among Rural, Suburban, and Urban Communities Following the Thailand Floods of 2011*. National Science Foundation.

### **TEACHING**

# **Teaching Experience**

### **University of North Texas**

EADP 2700, Current Issues in Emergency Management, 4 courses.

EADP 3010, Introduction to Emergency Management, 3 courses.

EADP 3035, Hazard Mitigation and Preparedness, 17 courses.

EADP 4040, International Disasters- Study Abroad Peru

EADP 4040, International Disasters- Study Abroad Nicaragua

EADP 4040, International Disasters- Study Abroad Panama

EADP 4080, Capstone Course in Emergency Management, 2 courses.

EMDS 5120, Applied Statistics in Disaster Science, 1 course.

EMDS 5800, Seminar in Emergency Management and Disaster Science, 2 courses.

EMDS 5950, Master's Thesis, 1 course.

EMDS 6800, Seminar in Emergency Management and Disaster Science, 1 course.

PADM 5510, Administrative Research Methods II, 5 courses.

PADM 5700, Seminar in Public Administration, 7 courses.

PADM 6710, Seminar in Public Administration and Management, 5 courses.

PADM 6900, Special Problems, 1 course.

PADM 6940, Directed Research in Public Administration, 2 courses.

PADM 6950, Doctoral Dissertation, 5 courses.

# **Directed Student Learning**

Dissertation Committee Member, Public Administration. (2015 - December 2018).

Advised: Abdullah Alshammari

Dissertation Committee Member, Public Administration. (2015 - December 2018).

Advised: Hevide Killic

Supervised Research, Emergency Management and Disaster Science. (March 2017 - May 2018).

Advised: Corey Olszewski

Dissertation Committee Member, Public Administration. (2015 - May 2017).

Advised: Laura Keyes

Dissertation Committee Chair, Public Administration. (2013 - December 2015).

Advised: Rejina Manandhar

Dissertation Committee Chair, Public Administration. (2012 - December 2014).

Advised: Carlos Samuel

### **SERVICE**

# **University Service**

Member, HPS RPT Committee (September 2019-Present)

Chairperson, EMDS RPT Committee. (September 2016 - 2019).

Mentor, Department Junior Faculty Mentor. (September 2015 - Present).

Program Coordinator, Emergency Administration and Planning. (August 2015 - Present).

Committee Chair, Department Representative to College Undergraduate Curriculum Committee. (2013 - 2018).

Committee Member, PACS/HPS First Flight. (2014 - 2017).

Member, HPS Dean's Search Committee. (March 2016 - November 2017).

Member, Department of Rehabilitation and Health Services RPT Committee. (September 2017 - October 2017).

Faculty Advisor, IAEM-SC. (January 2016 - August 2017).

Member, HPS Awards Nomination Committee. (May 2017 - June 2017).

Chairperson, EMDS Faculty Search Committee. (September 2016 - January 2017).

Dean's Designee, PACS, University Undergraduate Curriculum Committee. (2013 - 2016).

Committee Member, Department P-CEC. (2014 - 2015).

Committee Chair, UNT Sustainability Council Sustainability Leadership and Outreach Subcommittee. (2013 - 2015).

Committee Member, Department P-CEC. (2011 - 2015).

Committee Member, Department P-CEC. (2013 - 2014).

Guest Speaker, PADM Grad Student Colloquium. (October 24, 2014).

Committee Member, Department CDPC. (2011 - 2013).

Department Elections Judge. (2011 - 2013).

### **Professional Service**

Member, FEMA Region 6 Advisory Council, Denton, TX. (March 2016 - Present).

Committee Member, City of Denton Disaster Exercise Student POC, Denton, TX. (January 2015 - Present).

Chair (Elected), American Association of Geographers: Hazards, Risk, and Disasters Specialty Group. (2015 - 2017).

Director (Elected), American Association of Geographers Hazards, Risk, and Disasters Specialty Group. (2013 - 2015).

Paper Competition Reviewer, AAG Hazards, Risk, and Disasters Specialty Group - Gilbert F. White Award Reviewer. (January 2014 - March 2014).

## **Public Service**

Coach, Wise County Youth Basketball League, Decatur, TX. (November 2017 - Present).

Coach, Wise County Little Dribblers Basketball League, Decatur, TX. (December 1, 2016 - March 1, 2017).

# Consulting

State of Utah / University of Utah CNTH, United States of America. (2011 - 2013).