

## MELANIE GALL, PH.D., CFM

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Center for Emergency Management and Homeland Security  
School of Public Affairs

Arizona State University  
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**AREAS OF SPECIALIZATION**

Natural hazards and disasters	Disaster losses
Risk metrics and indices	Emergency management
Vulnerability and resilience	Applied GIS and remote sensing
Hazard mitigation and risk reduction	Environmental justice

**EDUCATION**

2007 Ph.D. University of South Carolina, Geography  
*"Indices of Social Vulnerability to Natural Hazards: A Comparative Evaluation"*  
Advisor: Susan L. Cutter

2002 M.S. University of Salzburg (Austria), Geography & Geoinformatics  
*"GIS and Multicriteria Decision Making in Disaster Management: The Identification of Flood Emergency Shelters in the Búzi and Save River Basin (Mozambique)"*  
Advisor: Josef Strobl

1999 B.S. University of Heidelberg (Germany), Geography (minors in biology and political science)

1998 ERASMUS Study Abroad, University of Bergen (Norway), Anthropology & Norwegian

**PROFESSIONAL HISTORY**

2022-present *Assistant Professor (tenure track)*, School of Public Affairs  
*co-Director*, Ctr for Emergency Management & Homeland Security (CEMHS)  
Affiliate Faculty, School of Geographical Sciences and Urban Planning  
Senior Global Futures Scientist, Global Futures  
Arizona State University

2017-2022 *Research/Clinical Professor (non-tenure track)*, *co-Director*, Center for Emergency Management & Homeland Security (CEMHS)  
Affiliate Faculty, School of Geographical Sciences and Urban Planning  
Arizona State University

2013-2016 *Research Assistant Professor (non-tenure track)*,  
Hazards & Vulnerability Research Institute, University of South Carolina

2013-2014 *Program Faculty*, Emergency Management & Homeland Security Leadership Program, Portland State University

2012-2013 *Visiting Assistant Professor*  
Department of History & Sociology, Claflin University

2008-2013 *Assistant Professor – Research (non-tenure track)* and Director of the Disaster Science and Management Center, Department of Geography & Anthropology, Louisiana State University; Affiliate at the Stephenson Disaster Management Institute

2007-2008 *Postdoctoral Fellow*  
Hazards & Vulnerability Research Institute, University of South Carolina

2000/2001 *Junior Technical Expert*  
Centro da Investigação e Documentação para Desenvolvimento Integral (CIDDI-GIS), Catholic University of Mozambique at Beira

1995-1997 *SICAD Technician*, Photogrammetrie München, Heidelberg (Germany)



<b>ACADEMIC HONORS &amp; AWARDS</b>	2022-present	Impact Scholar, Knowledge Exchange for Resilience, Arizona State University
	2022 & 2024	North American Alliance of Hazards and Disaster Research Institutes (NAAHDRI) Engagement Award
	2020	Fellow, Knowledge Exchange for Resilience, Arizona State University
	2018	Outstanding Reviewer Award for Computers, Environment, and Urban Systems
	2014	Outstanding Reviewer Award for the Natural Hazards Review, American Society of Civil Engineers
	2009	Service-Learning Faculty Scholars Award, Louisiana State University
	2008	Book Prize by the American Society for Public Administration, Section on Environment and Natural Resources Administration/SENRA for C. Rubin (Ed.) C. Rubin (Ed.), <i>Emergency Management: The American Experience 1900-2010</i> (1 <sup>st</sup> ed., pp. 185-205). Public Entity Risk Institute (PERI).
	2004	Jeanne X. Kasperson Student Paper Award Hazards Specialty Group, Association of American Geographers.
	2004	Paul E. Lovingood Student Paper Award Department of Geography, University of South Carolina at Columbia.
	2003 – 2005	International Peace Scholarship, P.E.O. Sisterhood
2002 – 2007	Tuition Scholarship, University of South Carolina	

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## RESEARCH

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### PUBLICATIONS

GOOGLE SCHOLAR CITATIONS: 2,916, H-INDEX: 23, I10-INDEX: 34

SCOPUS CITATIONS: 1,157, H-INDEX: 15

WEB OF SCIENCE CITATIONS: 982, H-INDEX: 13

Co-authorship key (at writing): <sup>UG</sup>undergraduate student, <sup>G</sup>graduate student, <sup>PD</sup>postdoctoral researcher, <sup>CP</sup>community partner, and <sup>PP</sup>public partner (government, NGO, industry).

#### Books

Cutter, S.L., **Gall, M.**, & Rubin, C. (eds.). U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe. 2<sup>nd</sup> edition. Routledge [in production, release date: March 31, 2025].



#### Manuscripts under review

Eschker<sup>G</sup>, S. J., Chakraborty, A., **Gall, M.**, Jevtic, P., & J. Su. State space modeling of mortgage default rate response to natural catastrophes. *North American Actuarial Journal* [IF: 1.4]

Boyle<sup>PD</sup>, E., Jevtic, P., & **Gall, M.** Joint Loss Model for Convective Storm Property Damage: Matrix Variate Time Series Bilinear Factor Analysis Approach. *North American Actuarial Journal* [IF: 1.4]

Lawrence, K. G., Sweeney, M., Werder, E. J., Jackson II, W. B., Chen, D., Christenbury, K. E., Zuzak, C., **Gall, M.**, Emrich, C. T., Engel, L. S., & Sander, D. P. Cardiovascular disease risk factors associated with residential natural hazard risk. *Environmental Health Perspectives* [IF: 10.1]

Helmrich, A., Gerber, B., **Gall, M.**, Horton, P., El Asmar, M., Neveu, M., El Kassis<sup>G</sup>, R., Sanboskani<sup>G</sup>, H., Vemulapalli<sup>G</sup>, K., Vogel<sup>UG</sup>, A., Yu<sup>G</sup>, Y., & White, D. Developing Long-term Risk & Resilience Management Strategies for Physical Asset and Critical Infrastructure Portfolios. *Frontiers in Built Environment*. [IF: 2.2]

Delos Santos<sup>G</sup>, C., Boyle<sup>PD</sup>, E., Jevtic, P., & **Gall, M.** Effects of Natural Hazards on Spatio-Temporal Patterns of Violent Crime in the United States. *American Journal of Criminal Justice*. [IF: 1.8]

**Gall, M.**, Boyle<sup>PD</sup>, E., Jevtic, P., & Cutter, S. L. U.S. Disaster Normals. *Natural Hazards* [IF: 3.7]



- Ali<sup>G</sup>, J., Wahl, T., Morim, J., Enriquez, A., **Gall, M.**, & Emrich, C.T. Multivariate compound events drive historical floods and associated losses along the U.S. East and Gulf Coasts. *npj Natural Hazards* [revise and resubmit]
- Mostafiz, R. B., Al Assi<sup>G</sup>, A., Taghinezhad, A., Friedland, C. J., Rohli, R. V., Rahim, M. A., Emrich, C. T., **Gall, M.**, & Johnson, E. Flood risk and mitigation calculator tool to support residents and decision-makers to make communities more resilient. *Frontiers in Built Environment*. [IF: 2.2] [revise and resubmit]

#### Peer-reviewed Journal Publications

- [30] Zhou<sup>PD</sup>, Y., Emrich, C. T., & **Gall, M.** (accepted). Knowing more about losing more: Exploring spatial-temporal patterns of damaging thunderstorm-related events in the contiguous United States. *Annals of the American Association of Geographers*. [IF: 3.9]
- [29] Ritchie, L.A., Cutter, S. L., Campbell<sup>PP</sup>, N., & **Gall, M.** (2025). The New Vulnerable: Changing Contexts of Food Insecurity in the United States. *Environment: Science and Policy for Sustainable Development* 67(1), 45-58. <https://doi.org/10.1080/00139157.2024.2419318> [IF: 5.0].
- [28] **Gall, M.**, Li<sup>G</sup>, P., & Friedland, C. J. (2024). Strategic Hazard Mitigation Planning. *International Journal of Disaster Risk Reduction*, 114, 104923. <https://doi.org/10.1016/j.ijdrr.2024.104923> [IF: 4.2]
- [27] **Gall, M.** 2024. Katastrophenmanagement und Soziale Dienste: Erfahrungen aus den USA [Emergency Management and Social Services: Experiences from the U.S.]. *Sozialmagazin*, 9-10, 81-86. <https://doi.org/10.3262/SM2410081>
- [26] Al Assi<sup>G</sup>, A., Mostafiz<sup>PD</sup>, R. B., Orooji, F., Taghinezhad<sup>G</sup>, F., **Gall, M.**, Rohli, R. V., Emrich, C. T., Friedland, C. J., & Johnson, E. (2024). Wind Risk and Mitigation Calculator Framework for Determining the Wind Annualized Risk for Single- and Multi-Family Homes to Support Resilient Community Decision-Making. *Resilient Cities and Structures*, 3(4), 21-33. <https://doi.org/10.1016/j.rcns.2024.08.002> [CiteScore: 3.2]
- [25] Lawrence, K., Sweeney, M., Werder, M., Zuzak<sup>PP</sup>, C., **Gall, M.**, Emrich, C. T., Cochran, F., Deng, X., Jackson II, W. B., Christenbury, K., Engel, L., & Sandler, D. (2024). Residential natural hazard risk and adverse mental health outcomes. *American Journal of Epidemiology*, kwae200, <https://doi.org/10.1093/aje/kwae200> [IF: 5.0]
- [24] Andresen<sup>G</sup>, A., Kurtz<sup>G</sup>, L. C., Chakalian, P. M., Hondula, D. M., Meerow, S., & **Gall, M.** (2024). A comparative assessment of household power failure coping strategies in three American cities. *Energy Research & Social Science*, 114, 103573. <https://doi.org/10.1016/j.erss.2024.103573> [IF: 6.7]
- [23] Ali<sup>G</sup>, J., A., Wahl, T., Enriquez<sup>PD</sup>, A. R., Rashid<sup>G</sup>, Md. M., Morim<sup>G</sup>, J., **Gall, M.**, & Emrich, C. T. (2023). The Role of Compound Climate and Weather Extreme Events in Creating Socio-economic Impacts in South Florida. *Weather and Climate Extremes*, 24, 100625. <https://doi.org/10.1016/j.wace.2023.100625> [IF: 8.1]
- [22] Andresen<sup>G</sup>, A., Kurtz<sup>G</sup>, L. C., Hondula, D. M., Meerow, S., & **Gall, M.** (2023). Understanding the Social Impacts of Power Outages in North America: A Systematic Review. *Environmental Research Letters*, 18, 053004. <https://doi.org/10.1088/1748-9326/acc7b9> [IF: 6.9]
- [21] Mostafiz, R., Rohli, R. V., Friedland, C. J., **Gall, M.**, & Bushra<sup>G</sup>, N. (2022). Future Crop Risk Estimation Due to Drought, Extreme Temperature, Hail, Lightning, and Tornado at the Census Tract Level in Louisiana. *Frontiers in Environmental Science*. <https://doi.org/10.1002/essoar.10511931.2> [IF: 5.4]
- [20] **Gall, M.**, Sheldon, T., & Collins, L. (2022). The economic impact of disaster-related school closures. *Risks, Hazards, and Crisis in Public Policy*, 13(3), 255-276. <https://doi.org/10.1002/rhc3.12242> [IF Scopus: 3.4]
- [19] Hu, M. D., Lawrence, K. G., **Gall, M.**, Emrich, C. T., Bodkin, M. R., Jackson, W. B., MacNeill, N., Kwok, R. K., Engel, L. S., & Sandler, D. P. (2021). Natural Hazards and Mental Health among US Gulf Coast Residents. *Journal of Exposure Science and Environmental Epidemiology*, 31(5), 842-851. <https://doi.org/10.1038/s41370-021-00301-z> [IF: 6.4]
- [18] Mostafiz, R., Friedland, C. J., Rohli, R. V., **Gall, M.**, Bushra<sup>G</sup>, N., & Gilliland<sup>G</sup>, J. M. (2020). Census-Block-Level Property Risk Estimation Due to Extreme Cold Temperature, Hail, Lightning, and Tornadoes in Louisiana, U.S.A. *Frontiers in Earth Science*. <https://doi.org/10.3389/feart.2020.601624>. [IF: 3.7]



- [17] **Gall, M.**, & Friedland, C. J. (2020). If Mitigation Saves \$6 Per Every \$1 Spent, Then Why Are We Not Investing More? A Louisiana Perspective on a National Issue. *Natural Hazards Review*, 21(1), [https://doi.org/10.1061/\(ASCE\)NH.1527-6996.0000342](https://doi.org/10.1061/(ASCE)NH.1527-6996.0000342) [IF: 4.2]
- [16] de Sherbinin, A., Bukvic, A., Rohat, G., **Gall, M.**, McCusker, B., Preston, B., Apotsos, A., Fish, C., Kienberger, S., Muhonda, P., Wilhelmi, O., Macharia, D., Shubert, W., Sliuzas, R., Tomaszewski, B. & Zhang, S. (2019). Climate change vulnerability mapping: a systematic review and recommendations for the future. *WIREs Climate Change*. <https://doi.org/10.1002/wcc.600> [IF: 10.1]
- [15] Cutter, S.L., Emrich, C.T., **Gall, M.**, & Reeves, R. (2018). Flash flood risk and the paradox of urban **ASU** development. *Natural Hazards Review*, 19(1), online. [IF: 4.2]
- [14] Cutter, S. L., & **Gall, M.** (2015). Sendai Targets at Risk. *Nature Climate Change*, 5(8), 707-709.
- [13] **Gall, M.**, Nguyen<sup>6</sup>, K. H., & Cutter, S. L. (2015). Integrated research on disaster risk: Is it really integrated? *International Journal of Disaster Risk Reduction*, 12 (June), 255-267. <https://doi.org/10.1016/j.ijdrr.2015.01.010> [IF: 4.8]
- [12] **Gall, M.** 2015. The Suitability of Disaster Loss Databases to Measure Loss and Damage from Climate Change. *International Journal of Global Warming*, 8(2), 170-190. [IF: 1.0]
- [11] Robinson, S. E., Gerber, B. J., Eller, W. S., & **Gall, M.** (2013). Emergency planning and disabled populations: assessing the FNSS approach. *International Journal of Mass Emergencies and Disasters*, 31(2), 315-329. [IF: 2.0]
- [10] Robinson, S. E., Eller, W. S., **Gall, M.**, & Gerber, B. J. (2013). The core and periphery of emergency management networks. *Public Management Review*, 15(3), 344-362. [IF: 6.0]
- [9] Friedland, C. J., & **Gall, M.** (2012). True cost of hurricanes – case for a comprehensive understanding of multihazard building damage. *Leadership and Management in Engineering*, 12(3), 134-146. [IF: 7.9]
- [8] Fielding, W. J., **Gall, M.**, Green<sup>PP</sup>, D., & Eller, W. S. (2012). Care of dogs and attitudes of dog owners in Port-au-Prince, the Republic of Haiti. *Journal of Applied Animal Welfare Science*, 15(3), 236-253. [IF: 1.6] <https://www.tandfonline.com/doi/full/10.1080/10888705.2012.683760>
- [7] **Gall, M.**, Borden, K. A., Emrich, C. T., & Cutter, S. L. (2011). The Unsustainable Trend of Natural Hazard Losses in the United States. *Sustainability*, 3(11), 2157-2181 (DOI: 10.3390/su3112157). [IF: 3.9]
- [6] Melton<sup>6</sup>, G., **Gall, M.**, Mitchell, J. T., & Cutter, S. L. (2010). Hurricane Katrina surge delineation: implications for future storm surge forecasts and warnings. *Natural Hazards*, 54(2), 519-536 (DOI: 10.1007/s11069-009-9483-z). [IF: 3.2]
- [5] **Gall, M.**, Borden<sup>6</sup>, K. A., & Cutter, S. L. (2009). When do losses count? Six fallacies of loss data from natural hazards. *Bulletin of the American Meteorological Society*, 90(6), 1-11. [IF: 9.1]
- [4] **Gall<sup>6</sup>, M.**, Boruff, B. J., & Cutter, S. L. (2007). Assessing flood hazard zones in the absence of digital floodplain maps: a comparison of alternative approaches. *Natural Hazards Review*, 8(1), 1–21. [IF: 4.2]
- [3] Cutter, S. L., Emrich<sup>6</sup>, C. T., Mitchell, J. T., Boruff, B. J., **Gall<sup>6</sup>, M.**, Schmidtlein<sup>6</sup>, M., Burton<sup>6</sup>, C., & Melton<sup>6</sup>, G. (2006). The long road home: race, class, and recovery from Hurricane Katrina. *Environment*, 48(2), 8-20.
- [2] **Gall<sup>6</sup>, M.** (2004). Where to go? Access to emergency shelters in Mozambique. *Disasters*, 28(1), 82-97. [IF: 3.3]
- [1] **Gall<sup>6</sup>, M.**, Lang, S., & Zeil, P. (2001). Nach der Katastrophe ist vor der Katastrophe: GIS und Fernerkundung im Desastermanagement in Mosambik [After a catastrophe is before a catastrophe: GIS and remote sensing in emergency management in Mozambique]. *GIS GeoBIT-Business* 11, 14-16.

#### In Preparation:

**Gall, M.**, Li, P., Boyle, E., Emrich, C. T., Friedland, C. J., Mostafiz, R., Cutter, S. L., Derakhshan, S., Wahl, T., Enriquez, A. R., & Johnson, E. A consumer metric for disaster risk: the HazardReady Score. *Geomatics, Natural Hazards, and Risk* [IF: 4.5]

**Gall, M.**, & Aquilino, M. Designing for Resilience. *Global Environmental Change*.

**Gall, M.** The forgotten hazard: heat. *Climate Policy or Environment and Planning*.



Gall, M., Smith-Heisters, S., Campbell, N., Cutter, S. L., & Ritchie, R. Continuity and emergency planning for food banks. *Agriculture and Human Values* [IF: 4.5]

#### Peer-Reviewed Book Chapters

- [17] Cutter, S.L., **Gall, M.**, & Rubin, C. (forthcoming). We were barely prepared for the past: we are not prepared for the new normal? In: S. L. Cutter, **M. Gall**, & C. Rubin (Eds.), *U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe*. 2<sup>nd</sup> edition. Routledge [release date: March 21, 2025].
- [16] **Gall, M.** (forthcoming). Not enough water: Drought emergencies in the American Southwest. In S. L. Cutter, **M. Gall**, & C. Rubin (Eds.), *U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe*. 2<sup>nd</sup> edition. Routledge [release date: March 21, 2025].
- [15] Clark, S. S., & **Gall, M.** (forthcoming). From Phoenix to Buffalo: Experiences with extreme temperatures. In S. L. Cutter, **M. Gall**, & C. Rubin (Eds.), *U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe*. 2<sup>nd</sup> edition. Routledge [release date: March 21, 2025].
- [14] **Gall, M.** (forthcoming). Why insurance companies are pulling out of California and Florida, and how to fix some of the underlying problems. In *The Conversation on Extreme Weather*. John Hopkins University Press. [anticipated release: Fall 2025, updated reprint]
- [13] Gerber, B. J, Provost, C., & **Gall, M.** (accepted). Environmental Governance in Western Europe: A Comparative Assessment of Local Sustainability Practices in the Presence of Climate Change Vulnerability. In A. Sapat (Ed.), *Handbook of Environmental Governance*. Routledge.
- [12] **Gall, M.**, & Cutter, S. L. (in press). Hurrikan Katrina: gescheiterte Planung oder geplantes Scheitern? [Hurricane Katrina: a failure of planning or planned failure?] In C. Felgentreff, & T. Glade (Eds.), *Naturrisiken und Sozialkatastrophen (2<sup>nd</sup> ed.)*. Spektrum Akademischer Verlag. [release date: April 12, 2025]
- [11] Hayden, M. et al. (2023). Human Health. In: *Fifth National Climate Assessment*. Washington, D.C.: U.S. Global Change Research Program. <https://nca2023.globalchange.gov/chapter/15/> (role: technical contributor)
- [10] National Academies of Sciences, Engineering, and Medicine. (2019). Building and Measuring Community Resilience. National Academies Press. (Committee Member)  
<https://www.nap.edu/catalog/25383/building-and-measuring-community-resilience-actions-for-communities-and-the>
- [9] **Gall, M.** (2019). Loss reduction and sustainability. In C. Rubin, & S. L. Cutter (Eds.), *From Disaster to Catastrophe: U.S. Emergency Management in the 21st Century* (pp. 209-232). Routledge.
- [8] **Gall, M.**, & Cutter, S. L. (2019). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), **ASU** *Emergency Management: The American Experience* (3rd ed., pp. 191-217), CRC Press.
- [7] **Gall, M.** (2017.) Direct and Insured Flood Damage in the United States. In D. Molinari, S. Menoni, & F. Ballio (Eds.), *Flood Damage Survey and Assessment: New Insights from Research and Practice* (pp. 53-64). American Geophysical Union, Wiley.
- [6] **Gall, M.**, & Gerber, B. (2014). Hazard Mitigation, Economic Development, and Disaster Resiliency: A Comparative Analysis of Flood Control Policy and Practice in Germany, the Netherlands, and Great Britain. In N. Kapucu, & K. T. Liou (Eds.), *Disasters & Development: Examining Global Issues and Cases* (pp. 213-234). Springer.
- [5] **Gall, M.**, & Cutter, S. L. (2012). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), *Emergency Management: The American Experience 1900-2010* (2<sup>nd</sup> ed., pp. 191-212). Public Entity Risk Institute (PERI).
- [4] **Gall, M.** 2011. Social Dynamics of Unnatural Disasters: Parallels between Hurricane Katrina and the 2003 European Heat Wave. In *Dynamics of Disaster: Lessons on Risk, Response, and Recovery*, edited by R. A. Dowty and B. Allen, London: Earthscan, 159-172.





- [3] Cutter, S. L., **Gall**<sup>PD</sup>, M. & Emrich, C. T. (2008). Toward a comprehensive loss inventory of weather and climate hazards. In *Climate Extremes and Society*, edited by H. F. Díaz and R. J. Murnane. Cambridge: Cambridge University Press, 279-295.
- [2] Contributing author to Peterson, T. C., D. M. Anderson, S. J. Cohen, M. Cortez-Vázquez, R. J. Murnane, C. Parmesan, D. Phillips, R. S. Pulwarty, and J. M. R. Stone. 2008. Why Weather and Climate Extremes Matter. In *Weather and Climate Extremes in a Changing Climate, Regions of Focus: North America, Hawaii, Caribbean, and U.S. Pacific Islands*, edited by T. R. Karl, G. A. Meehl, C. D. Miller, S. J. Hassol, A. M. Waple, and W. L. Murray. Washington, DC: U.S. Climate Change Science Program and the Subcommittee on Global Change Research, 11:34. Available at <http://www.climatescience.gov/Library/sap/sap3-3/final-report/default.htm>.
- [1] **Gall**<sup>G</sup>, M., & Cutter, S. L. (2007). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), *Emergency Management: The American Experience 1900-2010* (1<sup>st</sup> ed., pp. 185-205). Public Entity Risk Institute (PERI).  
[2008 Book Prize by the American Society for Public Administration, Section on Environment and Natural Resources Administration/SENRA]

### Commissioned Publications

- [19] Gall, M. & Aquilino, M. (2023). Design for Resilience Guide and Workbook. U.S. Department of Housing and Urban Development. Phoenix, AZ: ASU Center for Emergency Management and homeland Security.
- [18] Smith-Heisters, S., Aquilino, M., Yu<sup>G</sup>, S., **Gall, M.**, Bienenstock, E., & Temes<sup>G</sup>, M. (2023). USAID Disaster Response Review: 2010-2020. Chicago, IL: Research Technical Assistance Center.
- [17] Studio Ma, Arizona State University, and U.S. Department of State. 2022. Global Futures Projects for Embassy 2050. Washington, DC: U.S. Department of State.
- [16] Jacobs<sup>G</sup>, D., Bao, T., **Gall, M.**, & Jevtić, P. (2022). Cybersecurity meta-analysis: investigation of cybersecurity assessments for USAID beneficiaries. Chicago, IL: Research Technical Assistance Center.
- [15] Central Midlands Council of Government. (2021). An all-natural hazard risk assessment and hazard mitigation plan for the Central Midlands Region of South Carolina. For the use by municipalities and jurisdictions of Fairfield, Lexington, Newberry, and Richland Counties.
- [14] Cutter, S. L., Emrich, C. T., **Gall, M.**, Harrison, S., McCaster, R., Derakhshan<sup>G</sup>, S., & Pham<sup>G</sup>, E. (2019). [Existing Longitudinal Data and Systems for Measuring the Human Dimensions of Resilience, Health, and Well-Being in the Gulf Coast](#). Washington, D.C.: Gulf Research Program (NASEM).
- [13] Campbell, N., Ritchie, L., **Gall, M.**, & Cutter, S. L. (2019). Relief, Recovery, and Resilience Network Initiative Final Report. Feeding America/Margaret A. Cargill Philanthropies.
- [12] Campbell, N., Ritchie, L., **Gall, M.**, & Cutter, S. L. (2019). Relief, Recovery, and Resilience Network Initiative Evaluation Findings Report 2: Cohort 2 Activities. Feeding America/Margaret A. Cargill Philanthropies. Available at <https://www.nationalacademies.org/cache/80ac/content/4885770000234289.pdf>
- [11] **Gall, M.**, Campbell, N., Cutter, S. L., & Ritchie, L. (2017). Disaster Planning for Food Banks: Literature **ASU** Review. Chicago, IL: Feeding America. <https://arcg.is/OKnui5>
- [10] Central Midlands Council of Government. (2016). An all-natural hazard risk assessment and hazard mitigation plan for the Central Midlands Region of South Carolina. For the use by municipalities and jurisdictions of Fairfield, Lexington, Newberry, and Richland Counties. <http://centralmidlands.org/publications/free-documents.html>
- [9] **IRDR**. (2014). Peril Classification and Hazard Glossary (IRDR AIRDR Publication No. 1). Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at [https://www.irdrinternational.org/uploads/files/2020/08/sxztCDwe0VzI4m6Ug3VLjkXSnh9vUAngozmPYAkp/IRDR\\_DATA-Project-Report-No.-1.pdf](https://www.irdrinternational.org/uploads/files/2020/08/sxztCDwe0VzI4m6Ug3VLjkXSnh9vUAngozmPYAkp/IRDR_DATA-Project-Report-No.-1.pdf)



- [8] **Gall, M.**, Cutter, S. L., & Nguyen<sup>G</sup>, K. (2014). Incentives for Disaster Risk Management (IRDR AIRDR Publication No. 2). Beijing, China: Integrated Research on Disaster Risk (IRDR). DOI: 10.13140/2.1.3178.8325. Available at <http://www.irdrinternational.org/2015/01/28/airdr-report-no-2/>
- [7] **Gall, M.**, Cutter, S. L., & Nguyen<sup>G</sup>, K. (2014). Governance in Disaster Risk Management (IRDR AIRDR Publication No. 3). Beijing, China: Integrated Research on Disaster Risk (IRDR). DOI: 10.13140/2.1.2130.2568. Available at <http://www.irdrinternational.org/2015/01/29/airdr-report-no-3>
- [6] **Gall, M.**, Cutter, S. L., & Nguyen<sup>G</sup>, K. (2014). Transformative Development and Disaster Risk Management (IRDR AIRDR Publication No. 4). Beijing, China: Integrated Research on Disaster Risk (IRDR). DOI: 10.13140/2.1.1605.9682. Available at <http://www.irdrinternational.org/2015/01/30/airdr-report-no-4/>
- [5] **Gall, M.**, Friedland, C., Joyner<sup>G</sup>, T. A., Orgera<sup>G</sup>, R., Fu<sup>G</sup>, C. & Ogea<sup>G</sup>, S. (2013). Disaster Resistant University Multi-Hazard Mitigation Plan. Baton Rouge, LA: Louisiana State University System, 970 p. Available at [http://dsm.lsu.edu/pr\\_hazmit.htm](http://dsm.lsu.edu/pr_hazmit.htm).
- [4] **Gall, M.** (2013). From Social Vulnerability to Resilience: Measuring Progress towards Disasters Risk Reduction. Intersections No. 13. Bonn: United Nations University Institute for Environment and Human Security (UNU-EHS). ISBN: 978-3-944535-00-5, 34 p. Available at <http://www.ehs.unu.edu/article/read/intersections>
- [3] **Gall, M.**, & Kreft<sup>PP</sup>, S. (2013). Measuring what matters? A suitability analysis of loss and damage databases for the climate change convention process. Bonn, Germany: Germanwatch, UNU-EHS, ICCCAD, MCII, and CDKN, 24 p. Available from <http://lossanddamage.net/4829>
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- [1] **Gall<sup>G</sup>, M.**, & Cutter, S. L. (2007). Natural and human-induced disasters and other factors affecting future emergency response and hazards management: trends and outlook. Water Resources Outlook, 2007-WRO-R-04, 16 October 2007. Alexandria, VA: Institute for Water Resources, U.S. Army Corps of Engineers. 86 p. Available from <http://www.iwr.usace.army.mil/inside/products/pub/pubsearchAll.cfm?alpha=N>.

#### Other Publications

- [16] Lakhina<sup>PP</sup>, S. J., **Gall, M.**, & Sanders, M. (2023). Increasing national resilience through an OpenDisaster data initiative. Federation of American Scientists. June 8, <https://fas.org/publication/increasing-national-resilience-through-an-open-disaster-data-initiative/>
- [15] **Gall, M.** (2023). Why insurance companies are pulling out of California and Florida, and how to fix some of the underlying problems. *The Conversation*. June 7, <https://theconversation.com/why-insurance-companies-are-pulling-out-of-california-and-florida-and-how-to-fix-some-of-the-underlying-problems-207172>, Republished in [Yahoo News](#), [Mountain Journal](#), and elsewhere  
Reach: 53,976 readers
- [14] Hale, M., & **Gall, M.** (2022). Foreword. In: *Creating Inclusive and Engaging Online Courses: A Teaching Guide*, M. Sanders (ed.). Northampton, MA: Elgar Publishing.
- [13] **Gall, M.**, Emrich C. T., & Aquilino, M. (2022). Flood risk ratings: Translating risk to future costs helps homebuyers and renters grasp the odds. *The Conversation*. July 28, <https://theconversation.com/flood-risk-ratings-translating-risk-to-future-costs-helps-homebuyers-and-renters-grasp-the-odds-186798>  
Reach: 10,466 readers



- [12] Gerber, B., & Gall, M. (2021). One month in, how Biden has changed disaster management and the US COVID-19 response. *The Conversation*. February 18, <https://theconversation.com/one-month-in-how-biden-has-changed-disaster-management-and-the-us-covid-19-response-155440>  
Reach: 31,485 readers
- [11] Gerber, B., & Gall, M. (2018). Coal ash spill highlights key role of environmental regulations in disasters. **ASU** *The Conversation*. September 20, <https://theconversation.com/relaxed-environmental-regulations-heighten-risk-during-natural-disasters-103411>  
Reach: 7,140 readers
- [10] Gall, M., & Cutter, S. L. (2016). Understanding Disaster Risk Through Loss Data. Input to Scoping report for and Open Risk Data and Modelling Report. Understanding Risk Network. <https://www.gfdrr.org/sites/default/files/solving-the-puzzle-contributions.pdf>
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- [8] Guha-Sapir, D., Davis, R., Gall, M., Wallemacq, P., & Cutter, S. L. (2015). Exploring the potential of geocoding the impact of disasters: The experience of global and national databases. *Geophysical Research Abstracts* 17, EGU-2015-15109.
- [7] IRDR. (2014). Guide to the IRDR Assessment on Integrated Research on Disaster Risk, IRDR AIRDR Publication No. 1. Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org/>
- [6] IRDR. (2014). Peril Classification and Hazard Glossary, IRDR DATA Publication No. 1. Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <http://www.irdrinternational.org/2014/03/28/irdr-peril-classification-and-hazard-glossary/>
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- [4] Gall<sup>G</sup>, M., Zeil, P., Lang, S., Blaschke, T., Steinbruch<sup>CP</sup>, F., & José<sup>CP</sup>, F. (2002). Distribution of relief supplies to flood victims in Mozambique - can remote sensing effectively contribute to disaster management? *Proceedings of the 2<sup>nd</sup> Workshop of the EARSeL Special Interest Group*, September 18-20, 2002, Bonn (Germany), pp. 87-94.
- [3] Steinbruch<sup>CP</sup>, F., Gall<sup>G</sup>, M., & José<sup>CP</sup>, F. (2002). Remote Sensing and GIS for Documentation and Evaluation of the Socio-Economic and Environmental Impact of the 2000 Floods in Central Mozambique. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information*, Vol. XXXIV, Part 6/W6, pp. 59-65.
- [2] Gall<sup>G</sup>, M. (2001). Geoinformation for rapid flood assessment and hazard mitigation in Central Mozambique (FLAME Mission II). Final Report, November 2001. Salzburg, Austria: University of Salzburg. Available at <http://www.zgis.at/projects/Flame/>.
- [1] Gall<sup>G</sup>, M. (2000). Geoinformation for rapid flood assessment and hazard mitigation in Central Mozambique (FLAME Mission I). Final Report. Salzburg, Austria: University of Salzburg. Available at <http://www.zgis.at/projects/Flame/>.

#### Research Data and Interactive Web-based Publications (public facing only):

- CEMHS. 2025. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 23, available at <https://sheldus.org>. (in progress)
- [26] CEMHS. (2024). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 22, available at <https://sheldus.org>.





- [25] CEMHS. (2023). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 21, available at <https://sheldus.org>.
- [24] Emrich, C. et al. (2022). HazardAware, available at <https://www.hazardaware.org>
- [23] CEMHS. (2022). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 20, available at <https://sheldus.org>.
- [22] CEMHS (2020). *Situational Awareness Dashboard for the Arizona Voluntary Organizations Active in Disasters* (AZ VOAD), available at <https://arcg.is/0XeaWu0>
- [21] **Gall, M., & Pinto<sup>G</sup>, N.** (2021). *Feed Your Community, Plan for Disasters*; a disaster preparedness planning tool for food banks funded by Feeding America, available at <https://arcg.is/0Knui5>
- [20] **Gall, M., & Pinto<sup>G</sup>, N.** (2021). *HDxCC Project Dashboard*; a practitioner-student project exchange website funded by the Federal Emergency Management Agency, available at <https://arcg.is/GPuaT>
- [19] **Gall, M.** (2020). *COVID-19 Recovery Dashboard for Social Safety Net Services Coalition* (Coconino County, AZ), available at <https://arcg.is/1n8LHi>
- [18] Roseland, M., Castillo, E., **Gall, M., & Pinto<sup>G</sup>, N.** (2020). Sustainable Maryvale: Using Community Capital to Localize the Sustainable Development Goals, available at <https://arcg.is/88iuq0>
- [17] CEMHS. (2020). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 19, available at <https://sheldus.org>.
- [16] CEMHS. (2019). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 18.1, available at <https://sheldus.org>.
- [15] CEMHS. (2018). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 17, available at <https://sheldus.org>.
- [14] CEMHS. (2018). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version **ASU** 16.1, available at <https://sheldus.org>.
- [13] HVRI. (2017). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 16, available at <https://sheldus.org>.
- [12] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 15.2, available at <https://sheldus.org>.
- [11] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 15.1, available at <https://sheldus.org>.
- [10] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 15, available at <https://sheldus.org>.
- [9] HVRI. (2015). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 14.1, available at <https://sheldus.org>.
- [8] HVRI. (2015). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 14, available at <https://sheldus.org>.
- [7] HVRI. (2014). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 13.1, available at <https://sheldus.org>.
- [6] HVRI. (2014). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 13, available at <https://sheldus.org>.
- [5] Gall, M. (2014). Exhibit "Explore the Economic and Human Impact of Natural Hazards In the United States" at Marian Koshland Science Museum, Washington D.C., March 2014 to present, available at <http://hvri.geog.sc.edu/sheldus/koshland/index.html>
- [4] HVRI. (2013). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 12, available at <https://sheldus.org>.
- [3] HVRI. (2009). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 7, available at <https://sheldus.org>.
- [2] HVRI. (2008). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 7, available at <https://sheldus.org>.



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## RESEARCH FUNDING

### External Grants

- 2023-2024 Margaret A. Cargill Foundation/Feeding America  
Strengthening Charitable Food System Capability for Effective Disaster Preparedness, Response and Recovery  
PI: Liesel Ritchie, Virginia Tech  
**Co-PIs:** Nnenia Campbell, Susan Cutter, and Melanie Gall  
Period of Grant: Jan. 2023—Dec. 2024, Amount: \$500,000, ASU portion: \$113,570
- 2022-2024 Society of Actuaries  
Leveraging machine learning and SHELDUS data to discern daily impact of disaster losses on mortgage-related investments  
PI: Antik Chakraborty  
**co-PIs:** Jianxi Su, Petar Jevtic, and Melanie Gall  
Period of Grant: Jun. 2022 – Dec. 2024; Amount: \$16,000
- 2019-2024 Gulf Research Program, National Academies of Sciences  
The New First Line of Defense: Building Community Resilience through Residential Risk Disclosure  
PI: Christopher Emrich, Univ. of Central Florida  
**Co-PIs:** Melanie Gall, Sergio Alvarez, Jacopo Baggio, Susan Cutter, Melissa Daigle, Monica, Farris, Carol Friedland, Melanie Gall, Kelly Klima, Kristy Lewis, Natasha Mendoza, Michelle Miro, William O'Dell, Niki Pace, Colin Polsky, Benjamin Preston, Tamara Sheldon, Sonia Stephens, Thomas Wahl, and James Wilkins  
Period of Grant: Oct. 2019 – Sep. 2024, Amount: \$3,403,554, ASU portion: \$386,363
- 2019-2023 US Housing and Urban Development  
Cost-effectiveness Evaluation of HUD Community Development Block Grant-Disaster Recovery (CDBG-DR) Resilience Investments  
PI: Eric Tate, Univ. of Iowa  
**Co-PI:** Christopher Emrich, Carol Friedland, Melanie Gall, Aaron Strong  
Period of Grant: Oct. 2019 – Sep. 2023, Amount: \$850,000, ASU portion: \$158,524
- 2022-2023 DHS Criminal Investigations and Network Analysis Center (CINA)  
Effects of Natural Disasters on Spatio-Temporal Patterns across Crime Types in the United States  
PI: Petar Jevtic  
**co-PI:** Melanie Gall  
Period of Grant: Aug. 2022 – Jul. 2023; Amount: \$96,090
- 2021-2023 USAID  
Disaster Response Review 2010-2020  
**PI:** Melanie Gall  
Co-PIs: Pamela DeLargy and Marie Aquilino, ASU  
Period of Grant: Sep. 2021 – Jul. 2023; Amount: \$179,888
- 2020-2023 Robert Wood Johnson Foundation  
Cool Kids, Cool Places, Cool Futures: Community-based, arts-enhanced, and youth-focused approach for equitable urban cooling and emergency management  
PI: Paul Coseo, ASU  
Co-PIs: Wanda Dalla Costa, Katja Brundiars, and Maria Jackson, ASU  
**Faculty participant**  
Period of Grant: Nov. 2020 – Jun. 2023; Amount: \$109,995



- 2013-2023  National Science Foundation  
 NRT: Citizen-Centered Smart Cities and Smart Living  
 PI: Troy McDaniel, ASU  
 Co-PI: Ram Pendyala, Cynthia Selin, and Ann McKenna, ASU  
**Faculty Participants:** Gail-Joon Ahn, Ashish Amresh, Spring Berman, Diana Bowman, Scott Cloutier, Paul Coseo, Melanie Gall, Brian Gerber, Katina Michael, Thad Miller, Hermanth Venkateswara, and Lauren Withycombe Keller  
 Period of Grant: Sep. 2018 – Aug. 2023, Amount: \$2,999,997
- 2021-2022 USAID  
 Cybersecurity Meta-analysis  
 PI: Youzhi (Tiffany) Bao, ASU  
**Co-PIs:** Melanie Gall and Petar Jevtic  
 Period of Grant: Sep. 2021 – Jun. 2022; Amount: \$59,655
- 2021-2022 Department of State  
 Innovation for Security, Resilience and Sustainable Operations  
 PI: Dave White, ASU  
**Co-PIs:** Melanie Gall, Mounir el Asmar, Brian Gerber, Philip Horton, Mark Neveu, and David Sailor  
 Period of Grant: Sep. 2021 – May 2022; Amount: \$515,489
- 2021-2022 High Street Consulting, LLC  
 COVID-19 After-Action Report and Improvement Plan  
**PI:** Melanie Gall  
 Co-PI: Elisa Bienenstock, ASU  
 Period of Grant: Oct 2021 – May 2022; Amount: \$84,075
- 2019-2022 Feeding America  
 Research and Evaluation Services  
 PI: Liesel Ritchie, Virginia Tech  
**Co-PIs:** Nnenia Campbell, Susan Cutter, Melanie Gall, and Jamie Vickery  
 Period of Grant: Dec. 2019 – Dec. 2022, Amount: \$220,000, ASU portion: \$35,000
- 2020-2021 Federal Emergency Management Agency  
 FEMA Region IV Higher Education – Practice Collaboration Tool  
**PI:** Melanie Gall  
 Co-PI: Brian Gerber, ASU  
 Period of Grant: Aug. 2020 – May 2021, Amount: \$3,000
- 2020 DOD-NAVY: Office of Naval Research (ONR)  
 HellHives™ for ADAPT  
 PI: Brian Gerber, ASU  
**Co-PIs:** Spring Berman, Nancy Cooke, and Melanie Gall, ASU  
 Period of Grant: May – Sep. 2020, Amount: \$50,001
- 2018-2019 Gulf Research Program, National Academies of Sciences  
 Longitudinal Data and Systems for Measuring the Human Dimensions of Resilience, Health, and Well-Being in the Gulf Coast  
 PI: Susan Cutter, Univ. of South Carolina  
**co-PIs:** Melanie Gall, Christopher Emrich, and Sayward Harrison  
 Period of Grant: Aug. 2018 – May 2019, ASU portion: \$15,000
- 2017-2018 Louisiana Governor’s Office of Homeland Security and Emergency Preparedness  
 Multi-scale spatio-temporal evaluation of mitigation effectiveness in reducing natural hazard damage and loss  
 PI: Carol Friedland, Louisiana State University



**Co-PI:** Melanie Gall, Robert Rohli, and T. Andrew Joyner  
 Period of Grant: Mar. 2015 – Feb. 2018, Amount: \$475,042 (ASU portion: \$185,054)

2017-2018 Arup  
 Uncertainty and Sensitivity Testing of the City Resilience Index Developed by Arup  
**PI:** Melanie Gall  
 Period of Grant: Jul. 2017 – Apr. 2018, Amount: \$38,200

2016-2018 Arizona Division of Emergency Management  
 FY 2017 EMGP  
 PI: Allen Clark, ASU  
**Co-PI:** Melanie Gall  
 Period of Grant: Aug. 2016 – Jul. 2018, Amount: \$35,254

2015-2017 South Carolina Emergency Management Division  
 Improving Risk Assessment in Support of State Hazard Mitigation Planning  
 PI: Christopher T. Emrich (transferred to Dr. Cutter in 2016), Univ of South Carolina  
**Co-PI:** Melanie Gall, and Susan L. Cutter  
 Period of Grant: Aug. 2016 – Jul. 2018, Amount: \$592,915

2015-2017 National Oceanic and Atmospheric Administration (NOAA)  
**ASU** Improving Drought Loss Accounting in the Spatial Hazard Events and Losses Database  
 for the United States (SHELDUS)  
 PI: Susan L. Cutter, Univ. of South Carolina  
**Co-PI:** Melanie Gall and Christopher T. Emrich  
 Period of Grant: Sep. 2015 – Aug. 2017, Amount: \$60,000

2016 Florida Department of Emergency Management (FDEM)  
 Web-based Risk Assessment Planning Project for the State of Florida  
 PI: Christopher T. Emrich, Univ. of South Carolina  
**Co-PI:** Melanie Gall and Susan L. Cutter  
 Period of Grant: Jul. 2015 – Jun. 2016, Amount: \$177,872

2015-2016 Central Midlands Council of Governments  
 Risk Assessment as part of the 2016 Hazard Mitigation Plan  
**PI:** Christopher T. Emrich and Melanie Gall, Univ. of South Carolina  
 Period of Grant: Jan 2015-May 2016, Amount: \$43,000

2014 Imagery grant from the DigitalGlobe Foundation in support of the project Feasibility of  
 Automated Hurricane Damage Detection using Object-Based Image Analysis (June  
 2015)  
**PI:** Melanie Gall

2013-2014 United Nations Secretariat of the International Strategy for Disaster Reduction (UNISDR)  
 State of the Science for the Global Assessment of Disaster Risk Management (GAR)  
**PI:** Susan L. Cutter and Melanie Gall, Univ. of South Carolina  
 Period of Grant: Jan. 2013 – Jun. 2014, Amount: \$46,978

2009-2010 National Oceanic and Atmospheric Administration (NOAA)  
 2010 Census Update of the Enhancement of the Social Vulnerability Index (SOVI) for  
 Use in Assessing Coastal Risk  
 PI: Christopher T. Emrich, Univ. of South Carolina  
**Co-PI:** Melanie Gall  
 Period of Grant: Aug. 2009 – Feb. 2010 Amount: \$50,000


2009-2013 Louisiana Governor's Office of Homeland Security and Emergency Preparedness  
 Disaster Resistant University – Multi-Hazard Mitigation Plan for the LSU System  
**PI:** Melanie Gall, Louisiana State University  
 Period of Grant: Sept. 2009 – Feb. 2013, Amount: \$680,214

2009-2012 National Science Foundation



- Managing Evacuee Ingress – Network Interactions and Community Hosting Performance  
 PI: Brian J. Gerber, Louisiana State University  
**Co-PI:** Warren Eller, Melanie Gall and Scott Robinson  
 Period of Grant: Sept. 2009 – Aug. 2012, Amount: \$320,048
- 2010-2012 Louisiana Sea Grant  
 Changing flood mitigation: The Consequences of New Flood Insurance Rate Maps on Louisiana Coastal Communities  
**PI:** Melanie Gall, Louisiana State University  
 Co-PIs: M. Jude Egan, Rachel A. Dowty and Daniel Monchuk  
 Period of Grant: Feb. 2010 – Jun. 2012, Amount: \$312,345
- 2010-2011 National Sea Grant College Program (NOAA)  
 Enhancing Sea Grant’s Ability to Help Coastal Communities Adapt to Climate Change  
 PI: James G. Wilkins, Louisiana State University  
**Co-PI:** Melissa Trosclair Daigle, Melanie Gall, and Charles A. Wilson  
 Period of Grant: May 2010 – May 2011, Amount: \$29,999
- 2010 Louisiana Department of Health & Hospitals  
 H1N1 Program Evaluation  
**PI:** Melanie Gall, Louisiana State University  
 Co-PI: Brian J. Gerber, Warren Eller  
 Period of Grant: Jun. – Jul. 2010, Amount: \$110,567

#### Internal Grants

- 2024-2025  University of Central Florida & Arizona State University  
 Building the Interdisciplinary Capacity to Explore Links Between Heat Hazard Losses, Power Outages, Extreme Events, and Social Vulnerabilities across the US  
 PI: Christopher Emrich  
**Co-PI:** Melanie Gall, Thomas Wahl, Petar Jevtic  
 Period of Grant: May 2024 – April 2025, Amount: \$40,397
- 2020-2021 Arizona State University, College of Health Solutions  
 Understanding the impacts of COVID19 on opioid use disorder treatment: from organizational-level response to patient experiences  
 PI: Raminta Daniulaityte, Natasha Mendoza  
**Co-PI:** Melanie Gall, Brad Doebbeling  
 Period of Grant: June 2020 – June 2021, Amount: \$20,000
- 2020 Arizona State University, Institute for Social Science Research (ISSR)  
 Sustainable Community Development Indicators and Digital Dashboard  
**PIs:** Elizabeth Castillo, Mark Roseland, and Melanie Gall  
 Period of Grant: May – August 2020, Amount: \$4,750
- 2020 Arizona State University, Knowledge Exchange for Resilience  
 Gaining Awareness and Eligibility for Heat Mitigation through Federal Hazard Mitigation Grant Programs  
**PI:** Melanie Gall  
 Period of Grant: January – December 2020, Amount: \$15,000
- 2018 Arizona State University, Watts College  
 Determinants of Disaster Mass Care Services Production and Impacts by Arizona Voluntary Nonprofit Organizations  
**PI:** Melanie Gall  
 Co-PI: Brian Gerber, Robert Ashcraft and James Herbert Williams  
 Period of Grant: April – September 2018, Amount: \$50,000





- 2018 **ASU** Arizona State University, Institute for Social Science Research (ISSR)  
 Determinants of Disaster Mass Care Services Production and Impacts  
 by Arizona Voluntary Nonprofit Organizations  
**PI:** Melanie Gall  
 Co-PI: Brian Gerber  
 Period of Grant: May-September 2018, Amount: \$7,987
- 2015-2016 University of South Carolina  
*Indirect Costs of School Closures during the 2015 Flash Floods*  
**PI:** Melanie Gall  
 Co-PIs: Tamara Sheldon and Larianne Collins  
 Period of Grant: Oct 2015 – May 2016, Amount: \$28,549
- 2015-2016 University of South Carolina  
*Leveraging Perishable Impact Data into Long-Term Recovery Forecasting*  
**PI:** Christopher Emrich  
**Co-PI:** Melanie Gall and Nathan Hunyh  
 Period of Grant: Oct 2015 – May 2016, Amount: \$26,550
- 2015 University of South Carolina  
*Feasibility of Automated Hurricane Damage Detection using Object-Based Image Analysis*  
**PI:** Melanie Gall  
 Period of Grant: Mar.– Aug. 2015, Amount: \$8,969
- 2011-2012 Coastal Sustainability Studio, Louisiana State University  
*Flood Depths, Building Codes, and Community Sustainability*  
**PI:** Carol Friedland  
**Co-PI:** Meredith Sattler, Melanie Gall, and Lynne Carter  
 Period of Grant: Aug. 2011 – Aug. 2012, Amount: \$21,000

## PRESENTATIONS

Co-authorship key (at time of presentation): <sup>UG</sup>undergraduate student, <sup>G</sup>graduate student, <sup>PD</sup>postdoctoral researcher, <sup>CP</sup>community partner, and <sup>PP</sup>public partner (government, NGO, industry).

- 2025 Tipaldo, J. et al. The Changing Demography of Disaster Impact in the US, 2012-2022. Population Association of America, Washington, D.C., April 10-15.
- 2025 Gall, M. Disasters and education: school closures disrupt more than learning. Northern California Earthquake Hazards Workshop, U.S. Geological Survey, January 28-30.
- 2024 Wahl, T., J. Ali, J. Morim, A. R. Enriquez, C. T. Emrich & M. Gall. Dissecting flood losses along the United States Gulf and East Coasts. American Geophysical Union, Washington, D.C., December 13.
- 2024 Gall, M. and E. Boyle<sup>G</sup>. U.S. Disaster Normals. 2023 American Association of Geographers, Honolulu, HI, April 16-20, 2024.
- 2024 Gall, M. Disaster Risk Metrics. Cambridge Disaster Research Network. University of Cambridge, February 20. (virtual presentation)
- 2023 Santos<sup>G</sup>, C. D., E. Boyle<sup>G</sup>, M. Gall, & P. Jevtic. Effects of Natural Hazards on Spatio-Temporal Patterns of Crime Types in the United States. Criminal Investigations and Network Analysis (CINA), George Mason University, Washington, D.C., December 5. (virtual presentation)
- 2023 Mostafiz, R., A. Al Assi<sup>G</sup>, C. Friedland, A. Rahim<sup>G</sup>, R. Rohli, C. Emrich, & M. Gall. Empowering Resilient Communities: The Flood Risk and Mitigation Calculator Tool for Informed Decision-Making. 2023 American Geophysical Union, San Francisco, CA, December 11-15, 2023.
- 2023 Al Assi<sup>G</sup>, A., R. Mostafiz, C. Friedland, C. Emrich, & M. Gall. Wind Risk and Mitigation Calculator Framework for Determining the Wind Annualized Risk for Single- and Multi-Family Homes to Support



- Resilient Community Decision-Making. 2023 American Geophysical Union, San Francisco, CA, December 11-15, 2023. (poster)
- 2023 Ali<sup>G</sup>, J., T. Wahl, A. Enriquez<sup>PD</sup>, M. Rashid<sup>G</sup>, M. Gall, & C. Emrich. Assessing Socio-economic Impacts of Compound Flooding for U.S. Coastal Communities. 2023 American Geophysical Union, San Francisco, CA, December 11-15, 2023.
- 2023 Gall, M., & C. Emrich. HazardAware: Democratizing Hazard, Risk, and Mitigation Information to Buy/Rent More Resilient Homes. CEP (Carbon and Energy Professionals) Conference and Exhibition Wellington, New Zealand, June 28. (virtual presentation)
- 2023 Helmrich, A., B. Gerber, M. Gall, & D. White. Developing Long-term Risk & Resilience Management Strategies for Large Portfolios. 30th International Symposium on Sustainable Systems and Technology – ISSST 2023, Fort Collins, CO, June 13-15.
- 2023 Boyle<sup>G</sup>, E., M. Gall, & P. Jevtic. U.S. Disaster Normals. 20<sup>th</sup> Climate Prediction Application Science Workshop, Asheville, NC, May 9-11, 2023.
- 2023 Gall, M. Spatial Hazards & Environmental Loss Database for the U.S. (SHELDUS). USGS Risk Community of Practice, Webinar, April 20, 2023.
- 2023 Gall, M. Spatial Hazards & Environmental Loss Database for the U.S. (SHELDUS). 2023 Local Mitigation Plan Review Workshop, FEMA Region IX, Oakland, CA, January 24-26. (virtual presentation)
- 2022 Zhou, Y. C. Emrich, & M. Gall. [Spatiotemporal variations of damaging thunderstorm-related hazards over the contiguous United States](#). 2022 American Geophysical Union Fall Meeting, Chicago, IL. December 12-16.
- 2022 Emrich, C, C. Friedland, M. Gall & C. Polsky. [The New First Line of Defense: Building Community Resilience through Residential Risk Disclosure](#). Thriving Communities Webinar, National Academies of Sciences Gulf Research Program, Webinar, December 6.
- 2022 Gall, M., C. Friedland, C. Emrich, S. Cutter, K. Lewis, S. Stephens, & T. Wahl. [HazardAware: Democratizing Hazard, Risk, and Mitigation Information to Buy/Rent More Resilient Homes](#). Friday Forum. Institute for Catastrophic Loss Reduction [Canada], Webinar, October 21.
- 2022 Gall, M. The Spatial Hazard Events & Losses Database for the United States. 24<sup>th</sup> Annual FEMA Higher-Ed Symposium, Emmitsburg, MD, June 6-9.
- 2022 Gall, M., C. Emrich, S. Cutter, C. Friedland, K. Lewis, S. Stephens, & T. Wahl. HazardAware: Democratizing Hazard, Risk, and Mitigation Information to Build More Resilient Homes. 24<sup>th</sup> Annual FEMA Higher-Ed Symposium, Emmitsburg, MD, June 6-9.
- 2022 Gall, M., C. Friedland, & P. Li<sup>G</sup>. [The need for strategic hazard mitigation planning](#). 43<sup>rd</sup> Annual Meeting of the Association for Public Policy Analysis and Management (APPAM), Austin, TX, March 27-29.
- 2021 Gall, M. *The value of estimating severe weather impacts*. [18th Annual Climate Prediction Applications Science Workshop](#). Phoenix, AZ, April 20, 2021 (virtual, postponed in 2020 due to pandemic).
- 2021 Gall, M. *Disaster geography and emergency management*. Spring 2021 Colloquium Series. School of Geographical Sciences and Urban Planning, Arizona State University, Tempe, AZ, April 5
- 2020 Williamson<sup>PD</sup>, S., M. Gall, & C. Foard. [County-level approaches to coastal Resilience: Trends, costs, and the importance of community wide efforts](#). National Association of Counties (NACo), September 16, 2020 (webinar)
- 2020 Gerber, B. & M. Gall. The COVID-19 pandemic from a disaster management perspective: current issues and future implications. ASU Watts College, Spotlight Lecture, April 21, 2020.
- 2020 Gall, M. & B. Gerber. Responding to a pandemic. Devils in the Details. <https://youtu.be/ldL8O9FLtTE>
- 2020 Wahl, T. et al. Why location matters: how smarter decision-making by renters and homebuyers will increase coastal resilience. Ocean Sciences Meeting, San Diego, CA February 16-21, 2020.
- 2019 Gerber, B., & M. Gall. *The Evolution of Emergency Management Policy and Practice in the United States: Key Factors in Performance Improvement*. PizzaSeminar, BIGS (Brandenburgisches Institut für Gesellschaft und Sicherheit), Berlin, Germany, September 27, 2019.



- 2019 *State of the Art in Hazards Management* (Keynote). Curriculum Development Workshop, NSF Natural Hazards Preparedness and Mitigation (HazPM), Phoenix, AZ, May 13, 2019.
- 2019 Mostafiz<sup>6</sup>, R. B., C. J. Friedland, R. V. Rohli, M. Gall, & J. M. Gilliland<sup>6</sup>. *Assessing Risk of Atmospheric Natural Hazards at the Census Block Level*. 115<sup>th</sup> Annual Conference of American Association of Geographers, Washington, DC, April 5, 2019.
- 2018 Gall, M. *SHELDUS Briefing*. Pima County Multi-Jurisdictional Hazard Mitigation Stakeholder Workshop, October 11, Tucson, AZ.
- 2018 Gall, M. *SHELDUS Briefing*. Sub-Committee on Disaster Reduction (National Science and Technology Council Committee on Environment, Natural Resources, and Sustainability), November 1, Webinar.
- 2017 Gall, M. *Disasters and Vulnerability*. Mandela Washington Fellowship, July 27, 2017, Phoenix, AZ.
- 2017 Gall, M. *Data integration and challenges: what is needed for effective communication to stakeholders*. **ASU** NAS/Gulf Research Program Opportunity Analysis Meeting on Tracking Community Resilience, February 15-16, Washington, DC.
- 2016 Sheldon, T., M. Gall, & L. Collins. *Disaster response, public safety, and community: The hidden costs of school closures*. SC Flood Conference, November 18, Columbia, SC.
- 2016 Gall, M. Keynote Lecture at GI\_Forum Special Session on *Integrated Disaster Risk Research: Challenges and Benefits*, AGIT 2016, July, Salzburg, Austria.
- 2016 Gall, M. *Disaster Loss Data in the United States. Risk Information Management, Risk Models, and Applications* (RIMMA2016 organized by CODATA Germany), June 27-29, Berlin, Germany.
- 2016 Gall, M. *Implementing IRDR's Peril Classification in SHELDUS*. NOAA's 14<sup>th</sup> Annual Climate Prediction Applications Science Workshop, March 23, Burlington, VT.
- 2015 Gall, M. *Flood Insurance in Coastal Louisiana: Savior or Villain?* Temple University, November 2, Philadelphia, PA.
- 2015 Guha-Sapir, D., R. Davis, M. Gall, P. Wallemacq, & S. L. Cutter. *Exploring the potential of geocoding the impact of disasters: The experience of global and national databases*, European Geosciences Union, April 12-17, Vienna, Austria.
- 2014 Gall, M. & S.L. Cutter. *SHELDUS*, EM-DAT Technical Advisory Group Meeting University, Washington D.C., December 8-10.
- 2014 Gall, M. *Hazard Mitigation Planning and the Use of HAZUS-MH in the United States*. UNIGIS online "u\_Lectures", February 26, Salzburg, Austria.
- 2013 Gall, M. *Loss Data in the United States*. Workshop on International Disaster Loss Data Recording: Where are we going? European Commission, Directorate General for Humanitarian Aid and Civil Protection, November 15, Brussels, Belgium.
- 2013 Gall, M. *What are Hazard Mitigation Plans and How to Include Adaptation?* Natural Hazard Mitigation Association Practitioners Symposium, July 16-17, Broomfield, CO.
- 2013 Gall, M. *Advancing Disaster Resistant University Planning beyond the Basic Requirements*. Disaster Resistant University Workshop, Univ. of New Orleans, CHART, March 20-22, New Orleans, LA.
- 2013 Gall, M. *Disaster Losses are not as Explicit as Temperature Change*. United Nations University Technical Workshop, Perspectives on Loss and Damage: Society, Climate Change, and Decision-Making, February 25-27, Bonn, Germany.
- 2012 Gall, M. *NFIP Reform Suggestions from the Field*, 36<sup>th</sup> Annual Conference of the Association of State Floodplain Managers, May 20-26, San Antonio, TX.
- 2012 Gall, M. *Assessing the Effects of Evacuee Hosting on Local Service Provision*, 108th Annual Meeting of the Association of American Geographers, February 24-28, New York, NY.
- 2012 Gall, M. *Flood Insurance: Love it or hate it*. NOAA Social Coast Forum – Social Science for Coastal Decision Making, Feb. 15-16, Charleston, SC.
- 2011 Gall, M. *Animal welfare in post-earthquake Port-au-Prince, Haiti*, 36<sup>th</sup> Annual Hazards Research and Application Workshop, July 12, Broomfield, CO.
- 2011 Gall, M. *Dogs, Cats and GPS: Implementing an Animal Survey in Post-earthquake Port-au-Prince, Haiti*, 107th Ann. Mtg. of the Assoc. of Amer. Geogr., Apr. 12-16, Seattle, WA.



- 2011 Gall, M. *Research Collaborations with Voluntary Non-profits in Post-Disaster Environments*. Workshop Non-profit Leadership on Emergencies and Disasters: Understanding Governance Issues in Community Relief and Recovery Efforts University of Colorado, Mar. 9, Denver, CO.
- 2011 Gall, M. *Combining Hazard Mitigation Planning with Service-learning*, Disaster Resistant University Workshop, Univ. of New Orleans CHART, Feb. 16-18, New Orleans, LA.
- 2010 Gall, M. *Vulnerability Assessments: Are our methods good enough?* Spatial Assessment and Analysis of Vulnerability Workshop, Jul. 6-7, Salzburg, Austria.
- 2009 Liner, R., & M. Gall. *How GIS mapping can aid your Non-profit*. Louisiana Voluntary Organizations Active in Disaster (VOAD) Training Day, May 29, Lafayette, LA.
- 2009 Gall, M. *Coastal hazards & inland flood risk: non-structural controls*, Flood Protection and Ecosystem Restoration Conference, Jan. 22, Baton Rouge, LA.
- 2008 Melton<sup>G</sup>, G., M. Gall<sup>PD</sup>, J. T. Mitchell, and S. L. Cutter *Hurricane Katrina Storm Surge Delineation*, , National Conference on Geography Education, Oct. 9-12, Dearborn, MI.
- 2008 Gall, M<sup>PD</sup>. *Is Vulnerability to Natural Hazards Measurable?* Department of Geography & Anthropology, Louisiana State University, Oct. 8, Baton Rouge, LA.
- 2007 Cutter, S. L. & M. Gall<sup>G</sup>. *U.S. Hazardscape & Implications for the Corps: Trends and Implications*. Provocation Session of the U.S. Army Corps of Engineers, Oct. 9, Washington, D.C.
- 2007 Cutter, S. L. & M. Gall<sup>G</sup>. *The Geography of Disaster Losses*. National Climatic Data Center, Jul. 17, Asheville, NC.
- 2007 Gall<sup>G</sup>, M. *Social Vulnerability Indices to Natural Hazards*, 103rd Ann. Mtg. of the Assoc. of Amer. Geogr., Apr. 17-21, San Francisco, CA.
- 2006 Gall<sup>G</sup>, M. *Social Vulnerability Indices: Theoretical exercises or invaluable assessment tools?* First Summer Academy on Social Vulnerability of UNU-EHS and MunichRe Foundation, Jul. 23-29, Munich, Germany.  
*The United Nation's Disaster Risk Index: A theoretical exercise or an invaluable vulnerability assessment tool?* 102nd Ann. Mtg. of the Assoc. of Amer. Geogr., Mar. 7-11, 2006, Chicago, IL.
- 2005 Cutter, S. L., J. T. Mitchell, B. J. Boruff, C. T. Emrich<sup>G</sup>, M. Gall<sup>G</sup>, M. C. Schmidtlein<sup>G</sup>, C. Burton<sup>G</sup>, and G. Melton<sup>G</sup>. *Predicted versus observed social vulnerability of coastal residents: Hurricane Katrina impacts in Mississippi and Alabama*. Department of Geography, University of South Carolina, Nov. 10, Columbia, SC.
- 2004 Gall<sup>G</sup>, M. *Vulnerability Reduction in Mozambique: The unused Potential of Emergency Shelters*, 100th Ann. Mtg. of the Assoc. of Amer. Geogr., Mar. 14-19, Philadelphia, PA.
- 2003 Gall<sup>G</sup>, M. *Modeling 100-year Flood Risks in South Carolina*, 28th Annual Hazards Research and Application Workshop, Jul. 13-16, Boulder, CO.
- 2003 Gall<sup>G</sup>, M. *Evaluation of flood risks in two districts of the Búzi River Basin, Mozambique*, Vulnerability and Risk Assessments Workshop, Jun. 3-5, Piura (Peru), organized by Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ).
- 2001 Gall<sup>G</sup>, M. *Impactos das cheias 2000: Results of the Búzi River Basin*, Catholic University of Mozambique, Aug. 8, Beira, Mozambique.
- 2001 Gall<sup>G</sup>, M. *Nach der Katastrophe ist vor der Katastrophe: GIS und Fernerkundung im Desastermanagement in Mosambik*, GIS Day 2001, Nov. 14, Salzburg, Austria.

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## TEACHING

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<b>COURSES</b>	Arizona State University
	PAF 160 How to Survive the 21 <sup>st</sup> Century (online)
	PAF 261 Hazards and Risk Management (in-person, developed new curriculum)
	PAF 360 Emergency Management I (new, in-person course)
	PAF 553/CPP 511 Hazard Mitigation Planning (new online, solutions-based course)
	PAF 559/CPP 570 GIS (Geographic Information Systems) for Hazards Analysis (new



online course)

CPM 3.1 Risk Management (Certified Public Manager program)

[renumbering of courses from CPP to PAF occurred after the integration of the Master's in Emergency Management and Homeland Security from the College into the School of Public Affairs in AY 23/24]

CPP 510 Hazards Governance

CRD 590 Conference and Reading

HSD 598 The Politics and Ethics of the Smart City (new, co-taught course)

University of South Carolina

GEOG 330 The Geography of Disasters (new, online course)

GEOG 535 Hazard Analysis and Planning (new, flipped/service-learning course)

Claflin University (HBCU)

HSSC 391 Social Statistics

SOCI 399 Social Dynamics of Disasters (new course)

PLJS 399 Environmental Justice (new course)

Portland State University

PA 410/510 Earth Sciences for Emergency Managers (new course/flipped classroom)

Louisiana State University

DSM 2000 Hazards, Disaster, and the Environment (new, online course)

ENVS 4262 Environmental Hazards Analysis (new service-learning course)

**STUDENT  
ADVISING**

Arizona State University

2025 (exp.) Cody Delos Santos, Mathematics and Statistical Sciences, PhD committee member

2025 (exp.) Summer Cliff, Geospatial Sciences and Urban Planning, PhD committee member

2025 (exp.) Philip Gilbertson, Geospatial Sciences and Urban Planning, PhD committee member

2025 Melanie Perez Herrera, Public Service and Public Policy with a concentration in Emergency Management and Homeland Security (BS), Honors contract

2024 Danielle Jacobs, "Cybersecurity for All: Towards a Cyber Harm Framework for Citizens," Computation and Augmented Intelligence, PhD committee member

2023 Esther Boyle, Mathematics and Statistical Sciences, PhD committee member

2023 Peiyao Li, "Organizational Adaptations and Dynamic Capabilities How the Performance of Disaster Relief Nonprofits is Shaped under Uncertainty," Community Resources and Development, PhD committee member

2022 Varun Chandra, Computer Science (BS), Honors thesis committee member

2021 Sabrina Scherzer, Geography, Norwegian University of Science and Technology (NTNU), PhD outside reader

2020 Adam Andresen, Sustainability, MS committee member

2018 Marena Sampson, Community Resources and Development, MS committee member

University of South Carolina

2020 Sahar Seyedeh Derakhshan, Geography, Univ. of South Carolina, PhD committee member

2015 Khai Hoan Nguyen, Geography, MS committee member






Louisiana State University

- 2014 Emily Powell, Geography, PhD committee member
- 2013 T. Andrew Joyner, Geography, PhD committee member
- 2012 Henrike Brecht, Geography, PhD committee member
- 2012 Chelsea Core, Geography, MS committee member
- 2012 Steven Ward, Geography, PhD committee member
- 2011 Katherine Bowers, Environmental Sciences, MS committee member
- 2010 Devyani Kar, Oceanography and Coastal Sciences, PhD committee member

**TEACHING  
FUNDING**

Council on Social Work Education (Katherina A. Kendall Grant)

 International Perspectives on Social Work Practice in Disaster Risk and Recovery  
 PI: Lauri Goldkind  
 co-PI: Melanie Gall and Caroline Schmitt  
 Period of Grant: Oct 2023—Sep 2026, Amount: \$9,962

University of South Carolina

Hazards Analysis and Planning (GEOG535)—Distributed Learning Course Development Grant  
 PI: Christopher T. Emrich  
 Co-PI: Melanie Gall  
 Period of Grant: May—August 2015, Amount: \$7,825

Department of Homeland Security

Disaster Science and Management Education Program in NDCIEM  
 PI: Patrick Hesp  
 Senior Personnel: Melanie Gall  
 Period of Grant: Jun. 2009 – Aug. 2010, Amount: \$150,486



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**SERVICE**

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**PROFESSIONAL ACTIVITIES & SERVICE**

**SCIENTIFIC  
COMMITTEES**

- 2019-2024  Committee Member, World Meteorological Organization HIWeather Project; Impacts, Vulnerability & Risk Task Team (IVR-TT) and Warning Value Chain Working Group (since November 2020), <http://hiweather.net/>
- 2017-2019  Committee Member, Consensus Report on [Building and Measuring Community Resilience](#), National Academies of Sciences
- 2013-2016 ex officio Member, DATA working group, Integrated Research on Disaster Risk (IRDR)
- 2012-2014 Member, Hazard Mitigation and Climate Adaptation Committee, Natural Hazard Mitigation Association

**CONTRIBUTIONS  
TO WORKSHOPS  
AND MEETINGS**

- 2024 Host, Organizer, and Fundraiser, 4<sup>th</sup> Fall Workshop of the Bill Anderson Fund. Tempe, AZ, October 13-15.
- 2024 Member and Panel Organizer, “From Risk to Resilience”, [Risk and Resilience Symposium](#), Arizona State University, September 19.
- 2024 Participant and Data Provider; Disasters, Disparities, Demography, and Decisions (D4) Hack Week, University of Washington, September 9-13.
- 2024 Moderator and panel organizer, “HazardAware: Effective and Affordable Risk Management and Mitigation Solutions”, 49th Annual Natural Hazards Research and Applications Workshop, Broomfield, CO, July 17.



- 2023 Invited participant, Digital Procurement Roundtable, New America, which results in Brief [“Striking Balance between Public Procurement and Innovation.”](#) Washington, DC, March 9.
- 2022 Host, Organizer, and Fundraiser, 3<sup>rd</sup> Fall Workshop of the Bill Anderson Fund. Tempe, AZ, October 12-14.
- 2022 Panelist, Session: [Frameworks for collaboration: communities and public universities.](#) July 14, National Hazard Mitigation Association Practitioners Workshop, Broomfield, CO.
- 2021 Host and Organizer, 2<sup>nd</sup> [Fall Workshop](#) of the Bill Anderson Fund, October 14-16, virtual.
- 2020 Host and Organizer, Inaugural [Fall Workshop](#) of the Bill Anderson Fund, October 15-17, virtual.
- 2019 Organizer, Speaker series on the intersection of emergency management and sustainability, ASU Julie Ann Wrigley Global Institute of Sustainability, Tempe, AZ.
- 2019 Panelist, Session: Indicators of Progress: Measuring Forward Movement Toward Disaster Risk Reduction. July 14-17, Natural Hazards Workshop, Broomfield, CO.
- 2018 Organizer, *The United States of Disaster Guestimates* (part of Hazards and Disasters Xchange Collaboratory Series), November 16, Tempe, AZ.
- 2018 Organizer, *How would Arizona respond to a natural disaster?* (part of Hazards and Disasters Xchange Collaboratory Series), October 18, Phoenix, AZ.  
<https://asunow.asu.edu/20181018-arizona-impact-how-would-arizona-respond-natural-disaster>
- 2017 Panelist, Session: Keeping Count: Deaths, damage, and dollars lost from disasters. July **ASU** 9-12, Natural Hazards Workshop, Broomfield, CO.
- 2016 co-Organizer “INQUIMUS 2016: Spatial and temporal dynamics of risk and vulnerability”, September 21-23, Salzburg, Austria.
- 2012 Organizer “Building a Resilient Louisiana: Hazard-Resistant Design and Construction” Workshop, May 15-16, Baton Rouge, LA.
- 2012 Facilitator, Munich Re Foundation Summer Academy “From Social Vulnerability to Resilience: Measuring Progress toward Disaster Risk Reduction”, Hohenkammer, Germany.
- 2011 Reviewer for Spatial Assessment and Analysis of Vulnerability Workshop, July 4-6, University of Salzburg, Austria
- 2010 *Disasters in Review* panel member, 107th Ann. Mtg. of the Assoc. of Amer. Geogr., Apr. 12-16, Seattle, WA.
- 2010 Scientific committee member, Spatial Assessment and Analysis of Vulnerability Workshop, July 6-7, University of Salzburg, Austria.
- 2009 Panel moderator for the session “Non-Structural Controls” at the Flood Protection and Ecosystem Restoration Conference, January 22-23, Baton Rouge, LA.
- 2008 Hurricane Gustav Evacuation & Shelter Hot Wash for Louisiana Governor’s Office of Homeland Security and Emergency Preparedness, November 13-14.
- 2006 Participant in First Summer Academy on Social Vulnerability “Global Water Hotspots”, organized by UNU-EHS and MunichRe Foundation, July 23-29, Munich, Germany.


**COMMUNITY SERVICE**

- 2021- Member, Board of Directors, National Hazard Mitigation Association
- 2020- Non-Voting Representative, Board of Directors, Arizona Voluntary Organizations Active in Disasters; development and maintenance of [AZ VOAD COVID-19 coordination and situational awareness dashboard](#)
- 2020- Lead of ASU academic partnership with the [Bill Anderson Fund](#)



2023 and 2017-2018 Member, Planning Committee, State Hazard Mitigation Plan, Department of Emergency and Military Affairs (DEMA)

2019-present Chair, Membership Committee  
Member, Board of Directors (2019-2021)  
North American Alliance of Hazards and Disaster Research Institutes ([NAAHDRI](#)), Boulder, USA

2018-  
 Reviewer, Gilbert F. White Thesis/Dissertation Award, Specialty Group “Hazards, Risks, and Disasters”, American Association of Geographer

2020 Member, Advisory Board, [Bill Anderson Fund Flagship](#) at the University of Delaware

2020 External center review for University of North Carolina at Charlotte

2019 Member, Technical Advisory Group, Environmental Public Health Tracking Program, Arizona Department of Health Services

2018 Development and Maintenance of web-based map for Florida VOADs (Hurricane Michael)

2018 City Group Member (Phoenix), UREx Sustainability Research Network

2018 GIS support for City of Phoenix, ESF#5, National Mass Care Exercise (May 21)

2017 American Geophysical Union (AGU) OSPA Session Mentor

2017 Development and Maintenance of web-based map for Florida VOADs (Hurricane Irma)

2017 Social Vulnerability and Resilience Working Group, National Risk Index

2016-2017 SESYNC Pursuit Project: Meta-Analysis of Climate Change Vulnerability  
**ASU** Mapping Studies: Improving Methods and Map Outputs; PI: Alex de Sherbinin

2010 Geospatial analysis support for the International Fund for Animal Welfare and Animal Relief Coalition in Haiti

2008 GIS support during Hurricane Gustav for East Baton Rouge Parish EOC, September 1-4.

2007 Beta-tester for HAZUS-MH MR3

**UNIVERSITY/  
DEPARTMENTAL  
SERVICE**

2022- Member; Undergraduate Committee, School of Public Affairs, Arizona State University

2025 Member; Search Committee, School of Public Affairs, Arizona State University

2019-2024 Advisor; Emergency Management Student Association (EMSA), Arizona State University

2023-2024 Member; Diversity, Equity, and Inclusion Committee, School of Public Affairs, Arizona State University

2023 Member; Search Committee, School of Public Affairs, Arizona State University

2023 Speaker; Faculty Development “Got a Grant? Now What do I do?”, Watts College, February 13, Arizona State University

2023 Doctoral Conference, Panel Member, Watts College, March 3, Arizona State University  


2019-2022 Graduate College Interdisciplinary Enrichment Fellowship Review  
Member; Hiring Committee, Public Service Academy  
Member; Hiring Committee, Emergency Management and Homeland Security Program  
Member, GIS Task Force, Arizona State University

2021 Ad-Hoc Fixed-Term Personnel Committee, Watts College, Arizona State University



2021 Excellence in University Service Award, Watts College, Arizona State University  
 2020-2021 Member, strategic center review for ASU GIOSI, Arizona State University  
 2019-2020 Member, Search Committee for Associate Research Dean position, Watts College, Arizona State University  
 2018-2019 Member, Innovation Collaboratory, Next-Generation Learning Environments workstream, Arizona State University  
 2018 Exhibitor, Undergraduate Student Research Fair, College of Public Service & Community Solutions, Arizona State University  
 2018 Session Moderator, PhD Research Conference, College of Public Service & Community Solutions, Arizona State University  
 2017 Judge, Cybersecurity Student Challenge, Arizona State University  
 2017 Judge, Undergraduate Research Symposium, College of Public Service & Community Solutions, Arizona State University

\_\_\_\_\_Joined ASU\_\_\_\_\_

2016 ASPIRE proposal reviewer, University of South Carolina  
 2015-2016 Member, ad-hoc Senate Welfare Committee Non-Tenure Track Faculty, University of South Carolina  
 2015-2016 Member, Steering Committee of SC Floods Initiative by Vice President for Research  
 2009-2012 Louisiana Sea Grant EDEN delegate (Extension Disaster Education Network)  
 2010-2011 LSU Dept. of Geography & Anthropology speaker's committee

**PROPOSAL  
 REVIEWER  
 PAST 5 YEARS**



Arizona Department of Emergency and Military Affairs (2017-2019, 2023, 2024)  
 National Science Foundation (2010, 2012, 2014, 2020, 2023)  
 U.S. Department of Homeland Security (2012, 2020, 2023)  
 Mississippi-Alabama Sea Grant (2014-2022)  
 UK Research and Innovation (2020)  
 Washington Sea Grant (2019)  
 National Academies of Sciences, Gulf Research Program (2019)  
 European Commission Joint Programming Initiative on Cultural Heritage (2018)  
 U.S. Department of Education (2011, 2013-2016)  
 Wisconsin Sea Grant (2015)

**EDITORSHIP**

*Natural Hazards Review* (associate editor since 2021, guest editor from 2008-2020)

*Frontiers in Built Environment, special issue on "Enhancing Resilience in Complex Systems: Transdisciplinary and Systems Approaches to Sustainable Infrastructure and Urban Development" (2024)*



*Natural Hazards Review, special issue on "Applying Machine Learning to Improve Natural Hazards Prediction and Mitigation" (2023-2024)*

**MANUSCRIPTS  
 REVIEWED  
 (PAST 5 YEARS)**

*Canadian Water Resources Journal (2022-2023)*  
*Climatic Change (2018-present)*  
*Economics of Disasters and Climate Change (2024)*  
*Environmental Research: Climate (2023)*  
*International Journal of Disaster Risk Reduction (2024)*  
*Journal of Homeland Security and Emergency Management (2023)*  
*Nature Communications (2022)*  
*Papers in Applied Geography (2024)*  
*Proceedings of the Natural Academies of Sciences (PNAS) Nexus (2022)*  
*Sociological Spectrum (2022)*



*Weather, Climate and Society* (2018-2020, 2023)

*Annals of the American Association of Geographers* (2018-2019)  
*Area* (2019)

*Computers, Environment, and Urban Systems* (2015, 2018)

*Environmental Research: Climate* (2022)

*Geosciences* (2017-2020)

*International Journal of Emergency Management* (2021)

*ISPRS International Journal of Geo-Information* (2015, 2017, 2018)

*Journal of Geography in Higher Education* (2020-2021)

*Nature Energy* (2018, 2020)

*Natural Hazards* (2006-2020)

*Natural Hazards and Earth Systems Sciences* (2016-2020)

*Natural Hazards Review* (2004 to present)

*Nature Sustainability* (2018-2020)

*Risk, Hazards and Crisis in Public Policy* (2021)

**BOOK REVIEWER**

Taylor & Francis Group (2020)

Routledge (2018)

Oxford University Press (2017)

Elsevier (2012)

Earthscan Ltd. (2009)

**FIELD WORK**

2020	COVID-19 data and coordination support for Arizona Voluntary Organizations Active in Disasters (AZ VOAD)
2018	National Mass Care Exercise, Phoenix, AZ, May 21-24
2015-2016	Georeferenced videography of flash flood recovery, Columbia, SC
2013	Post-Sandy recovery surveys, New Jersey, Oct. 13-17
2011	Mississippi River flooding/Morganza Spillway surveys
2010-2011	Flood insurance surveys in 5 coastal Louisiana parishes
2010	Post-Earthquake Animal Survey with the International Fund for Animal Welfare, September 13-19, Port-au-Prince, Haiti
2005 – 2008	7 field trips for post-Katrina recovery surveys of Mississippi coast
2001	Flood impact assessment, June 11-18, Búzi River Basin, Mozambique

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**SECTION: PROFESSIONAL DEVELOPMENT**

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**PROFESSIONAL  
CERTIFICATES  
AND TRAINING**

Certified Floodplain Manager (CFM), Association of State Floodplain Managers (since 2012)  
Emergency Management Training:  
E172 HAZUS-MH for Floods, 2012  
E296 Application of HAZUS-MH for Risk Assessment, 2012  
IS-22 Are you ready? An in-depth guide to citizen preparedness, 1.0 CEU, 2010  
IS-42 Social Media in Emergency Management, 0.3 CEU, 2013  
IS-100.a Introduction to the Incident Command System, 0.3 CEU, 2008  
IS-200.a ICS for Single Resources and Initial Action Incidents, 0.3 CEU, 2008  
IS-242.a Effective Communication, 0.8 CEU, 2013  
IS-271.a Anticipating Hazardous Weather and Community Risk, 0.9 CEU, 2013  
IS-328 Plan Review for Local Mitigation Plans, 0.3 CEU, 2014  
IS-386 Introduction to Residential Coastal Construction, 1.4 CEU, 2015  
IS-393.a Introduction to Hazard Mitigation, 1.0 CEU, 2011  
IS-700 National Incident Management System, 0.3 CEU, 2008  
IS-800.b Introduction to the National Response Framework, 0.3 CEU, 2008





IS-805 Emergency Support Function #5 – Emergency Management, 2008  
IS-922 GIS and Emergency Management, 0.3 CEU, 2017  
IS-1400: Foundations of Climate Science, 0.4 CEU, 2024  
MGT404 Sports and Special Events Incident Management, 2019

Academic Training:

Disability Resource Center AccessZone Training, Arizona State University, 2020  
Master Class for Online Teaching, Arizona State University, 2017  
Effective Online Instruction, University of South Carolina, 2014  
Service Learning, Louisiana State University, 2009

**CONSULTING** 3RNI Disaster Planning Evaluation for Feeding America (2017-2018)

**TECHNICAL SKILLS** Geospatial products: Esri ArcGIS desktop and ArcGIS Online  
Hazard and impact modeling software: HAZUS-MH, HEC-GeoHMS, SFM 3.3, FEMA BCA  
Statistical software: SPSS, SimLab, GeoDa, NAIAD  
Text analysis software: NVivo, Maxqda  
Programming languages: HTML  
Course management systems: Canvas, Blackboard, Moodle, and D2L  
Miscellaneous: Tableau, Overleaf/LaTeX  
Languages: English, German


**MEMBERSHIPS & AFFILIATIONS** American Association of Geographers (AAG)

American Geophysical Union (AGU)  
Arizona Association of Emergency Managers (AzEM, formerly AESA)  
Association for Public Policy Analysis & Management (APPAM)  
Association of State Floodplain Managers (ASFPM)  
Arbeitskreis Naturgefahren und Naturrisiken (Deutsche Gesellschaft für Geographie)  
Global Alliance of Disaster Research Institutes (GADRI)  
National Hazard Mitigation Association (NHMA)  
North American Alliance of Hazards and Disaster Research Institutes (NAAHDRI)  
Society for Risk Analysis

**MEDIA ENGAGEMENTS** 2024 quoted by Harry Stevens in “The real reason billion-dollar disasters like Hurricane Helene are growing more common”, The Washington Post (October 24), <https://www.washingtonpost.com/climate-environment/interactive/2024/billion-dollar-disasters-climate-change-economy/>  
quoted by Doug Bailey in “Seeking answers for insurance crisis left in Milton, Helene’s wake”, Insurance Newsnet (e-news, October 11), <https://insurancenewsnet.com/inarticle/seeking-answers-for-insurance-crisis-left-in-milton-helenes-wake>  
featured on The Conversation’s “Extreme Weather and Rising Insurance Costs” (webinar, October 9), <https://youtu.be/y9EB6t6VZnM?si=MYBg30s569fwAK7x>  
interviewed by Anna Phillips, Washington Post (October 4)  
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