MELANIE GALL, PH.D., CFM

	Center for Eme Homeland Secu School of Public		ergency Management and urity	Arizona State University Office: (602) 496-1040		
			c Affairs	email: melanie.gall@asu.edu		
AREAS OF	Natural hazaro		s and disasters	Disaster losses		
SPECIALIZATION	Risk m	netrics an	d indices	Emergency management		
	Vulne	rability aı	nd resilience	Applied GIS and remote sensing		
			ion and risk reduction	Environmental justice		
EDUCATION	2007	Dh D II	niversity of South Carolina Go	pography		
LDUCATION	2007		University of South Carolina, Geography s of Social Vulnerability to Natural Hazards: A Comparative Evaluation"			
			-	arai nazaras. A comparative Evaluation		
	2002	Advisor: Susan L. Cutter M.S. University of Salzburg (Austria), Geography & Geoinformatics				
	2002					
				g in Disaster Management: The Identification		
		-	<i>y</i>	zi and Save River Basin (Mozambique)"		
		Advisor	: Josef Strobl			
	1999	B.S. Uni	versity of Heidelberg (Germar	ny), Geography (minors in biology and political		
		science)			
	1998	ERASM	US Study Abroad, University o	f Bergen (Norway), Anthropology & Norwegian		
PROFESSIONAL	2022-	present	Assistant Professor (tenure t	rack), School of Public Affairs		
HISTORY			co-Director, Ctr for Emergency Management & Homeland Security (CEMHS)			
			Affiliate Faculty, School of Geographical Sciences and Urban Planning			
			Senior Global Futures Scientist, Global Futures			
	2017	2022	Arizona State University			
	2017-2	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			
			Hazards & Vulnerability Research Institute, University of South Carolina			
	2013-2014		Program Faculty, Emergency	Management & Homeland Security Leadership		
			Program, Portland State Uni	versity		
			Visiting Assistant Professor			
			Department of History & Soc	ciology. Claflin University		
	2008-2	2013		ch (non-tenure track) and Director of the		
	2006-2013		Disaster Science and Management Center, Department of Geography &			
			Anthropology, Louisiana State University; Affiliate at the Stephenson Disaster			
				te offiversity, Affiliate at the Stephenson Disaster		
	2007-2008		Management Institute			
			Postdoctoral Fellow			
			•	earch Institute, University of South Carolina		
			Junior Technical Expert			
				cumentaçao para Desenvolvimento Integral		
			(CIDDI-GIS), Catholic Univers	ity of Mozambique at Beira		
	1995-1997		SICAD Technician, Photogram	nmetrie München, Heidelberg (Germany)		

ACADEMIC	2022—2024	Impact Scholar, Knowledge Exchange for Resilience, Arizona State University
Honors &	2022 & 2024	North American Alliance of Hazards and Disaster Research Institutes
AWARDS		(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.), Emergency Management: The American Experience 1900-2010
		(1 st 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

RESEARCH

PUBLICATIONS

Co-authorship key (at writing): ^{UG}undergraduate student, ^Ggraduate student, ^{PD}postdoctoral researcher, ^{CP}community partner, and ^{PP}public partner (government, NGO, industry).

Books

Cutter, S.L., **Gall, M.**, & Rubin, C. B. (eds.) (2025). U.S. Emergency Management in the 21st century: from disaster to catastrophe. 2nd edition. Routledge. https://doi.org/10.4324/9781003591900

Peer-reviewed Journal Publications

- [35] Helmrich, A., Gerber, B., **Gall, M.,** Horton, P., El Asmar, M., Neveu, M., El Kassis^G, R., Sanboskani^G, H., Vemulapalli^G, K., Vogel^{UG}, A., Yu^G, Y., & White, D. (accepted). Developing Long-term Risk & Resilience Management Strategies for Physical Asset and Critical Infrastructure Portfolios. *Frontiers in Built Environment* 11. doi: 10.3389/fbuil.2025.1530343 [5-year IF: 2.5]

 Paper Accepted By Journal But Final Publication Halted By The Sponsor (U.S. Department of Housing and Urban Development)
- [34] Mostafiz, R. B., Al Assi^G, A., Taghinezhad, A., Friedland, C. J., Rohli, R. V., Rahim, M. A., Emrich, C. T., **Gall, M.**, & Johnson, E. (2025). Flood risk and mitigation calculator tool to support residents and decision-makers to make communities more resilient. *Frontiers in Built Environment*. https://doi.org/10.3389/fbuil.2025.1486791 [5-year IF: 2.5]
- [33] Delos Santos^G, C., Boyle^{PD}, E., Jevtic, P., & **Gall, M**. (2025). Effects of Natural Hazards on Spatio-Temporal Patterns of (Violent) Crime in the United States. *American Journal of Criminal Justice*. [5-year IF: 3.4]
- [32] Zhou^{PD}, Y, Emrich, C. T., & **Gall, M.** (2025). 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*. [5-year IF: 4.4]
- [31] Lawrence, K. G., Sweeney, M., Werder, E. J., Zuzak, C., **Gall, M.**, Emrich, C. T., Buller, I. A., Jackson II, W. B., Chen, D., Christenbury, K., Engel, L. S., & Sandler, D. P. (2025). Prevalence of cardiovascular disease

- risk factors associated with residential natural hazard risk. *Science of the Total Environment* 977: 179335. https://doi.org/10.1016/j.scitotenv.2025.179335 [5-year IF: 8.6]
- [30] Ali^G, J., Wahl, T., Morim, J., Enriquez, A., **Gall, M.**, & Emrich, C.T. (2025). Multivariate compound events drive historical floods and associated losses along the U.S. East and Gulf Coasts. *npj Natural Hazards* 2, 19. https://www.nature.com/articles/s44304-025-00076-5 [IF not yet available]
- [29] Ritchie, L.A., Cutter, S. L., Campbell^{PP}, 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 [5-year IF: 4.0].
- [28] **Gall, M.,** Li^G, 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 [5-year IF: 4.7]
- [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 [IF: n/a]
- [26] Al Assi^G, A., Mostafiz^{PD}, R. B., Orooji, F., Taghinezhad^G, 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^{PP}, 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 [5-year IF: 5.1]
- [24] Andresen^G, A., Kurtz^G, 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 [5-year IF: 7.2]
- [23] Ali^G, J., A., Wahl, T., Enriquez^{PD}, A. R., Rashid^G, Md. M., Morim^G, 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 [5-year IF: 7.3]
- [22] Andresen ^G, A., Kurtz ^G, 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 [5-y ear IF: 7.2]
- [21] Mostafiz, R., Rohli, R. V., Friedland, C. J., **Gall, M.**, & Bushra^G, 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/10.3389/fenvs.2022.919782 [5-year IF: 3.7]
- [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 [5-year IF: 2.6]
- [19] Hu, M. D., Lawrence, K. G., Gall, M., Emrich, C. T., Bodkin, M. R., Jackson, W. B., MacNell, 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 [5-year IF: 4.8]
- [18] Mostafiz, R., Friedland, C. J., Rohli, R. V., **Gall, M.,** Bushra^G, N., & Gilliland^G, 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. [5-year IF: 2.4]
- [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 [5-year IF: 2.5]

- [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 [5-year IF: 11.1]
- [15] Cutter, S.L., Emrich, C.T., **Gall, M.**, & Reeves, R. (2018). Flash flood risk and the paradox of urban development. *Natural Hazards Review*, 19(1), online. [5-year IF: 2.4]
- [14] Cutter, S. L., & **Gall, M**. (2015). Sendai Targets at Risk. *Nature Climate Change*, 5(8), 707-709. [5-year IF: 31.1]
- [13] Gall, M., Nguyen^G, 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 [5-year IF: 4.7]
- [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. [5-year 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. [5-year 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. [5-year IF: 6.30]
- [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. [5-year IF: 2.6]
- [8] Fielding, W. J., **Gall, M.**, Green^{PP}, 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. https://doi.org/10.1080/10888705.2012.683760 [5-year IF: 1.6]
- [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). [5-year IF: 3.6]
- [6] Melton^G, 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). [5-year IF: 3.6]
- [5] **Gall, M.**, Borden^G, 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. [5-year IF: 25.2]
- [4] **Gall**^G, **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. [5-year IF: 2.5]
- [3] Cutter, S. L., Emrich^G, C. T., Mitchell, J. T., Boruff, B. J., **Gall^G, M.,** Schmidtlein^G, M., Burton^G, C., & Melton^G, G. (2006). The long road home: race, class, and recovery from Hurricane Katrina. *Environment*, 48(2), 8-20. [5-year IF: 4.0].
- [2] **Gall**^G, **M**. (2004). Where to go? Access to emergency shelters in Mozambique. *Disasters*, 28(1), 82-97. [5-year IF: 2.7]

 [Recipient of the Jeanne X. Kasperson Student Paper Award; The Jeanne X. Kasperson Student Paper Competition highlights hazard and disaster research from emerging scholars in the field. The award is issued by the American Association of Geographer's Hazards, Risks, and Disasters Specialty Group.]
- [1] **Gall**^G, **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. [IF: n/a]

Peer-Reviewed Book Chapters

- [16] 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.
- [15] **Gall, M.** (2025). Not enough water: Drought emergencies in the American Southwest. In S. L. Cutter, **M. Gall**, & C. Rubin (Eds.), *U.S. Emergency Management in the 21st century: from disaster to catastrophe*. (2nd ed., pp. 143-160). Routledge. https://doi.org/10.4324/9781003591900
- [14] Clark, S. S., & Gall, M. (2025). From Phoenix to Buffalo: Experiences with extreme temperatures. In S. L. Cutter, M. Gall, & C. Rubin (Eds.), U.S. Emergency Management in the 21st century: from disaster to catastrophe. (2nd ed., pp. 122-140). Routledge. https://doi.org/10.4324/9781003591900
- [13] **Gall, M., &** Cutter, S. L. (2025). Hurrikan Katrina: gescheiterte Planung oder geplantes Scheitern? [Hurricane Katrina: a failure of planning or planned failure?] In C. Felgentreff, & T. Glade (Eds.), *Naturrisiken und Sozialkatrastrophen* (2nd ed., pp. forthcoming). Spektrum Akademischer Verlag. [release date: January 10, 2026]
- [12] 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)
- [11] 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
- [10] **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.
- [9] **Gall, M.,** & Cutter, S. L. (2019). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), *Emergency Management: The American Experience* (3rd ed., pp. 191-217), CRC Press.
- [8] **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.
- [7] **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.
- [6] **Gall, M.,** & Cutter, S. L. (2012). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), *Emergency Management: The American Experience 1900-2010* (2nd ed., pp. 191-212). Public Entity Risk Institute (PERI).
- [5] **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.
- [4] Cutter, S. L., **Gall**^{PD}, **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.
- [3] Cutter, S. L, & **Gall, M**. (2008). Hurrikan Katrina: gescheiterte Planung oder geplantes Scheitern? [Hurricane Katrina: a failure of planning or planned failure?] In C. Felgentreff, & T. Glade (Eds.), *Naturrisiken und Sozialkatrastrophen* (1st ed.). Spektrum Akademischer Verlag, 353-366.
- [2] 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. (role: technical contributor)
- [1] **Gall^G, M.,** & Cutter, S. L. (2007). 2005 Events and Outcomes: Beyond Hurricane Katrina. In C. Rubin (Ed.), *Emergency Management: The American Experience 1900-2010* (1st 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^G, S., **Gall, M.,** Bienenstock, E., & Temes^G, 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^G, 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^G, S., & Pham^G, E. (2019). <u>Existing Longitudinal Data and Systems for Measuring the Human Dimensions of Resilience, Health,</u> 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 Review. Chicago, IL: Feeding America. https://arcg.is/0Knui5
- [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
- [8] Gall, M., Cutter, S. L., & Nguyen^G, 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^G, 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^G, 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^G, T. A., Orgera^G, R., Fu^G, C. & Ogea^G, 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.
- [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^{PP}, 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
- [2] Cutter, S. L., Melton^G, G., & **Gall, M**. (2008). Implementation of the social vulnerability index for Martin County, Florida: methods and results. Alexandria, VA: Marstel Day Consultants, Institute for Water Resources, U.S. Army Corps of Engineers 15 p.
- [1] Gall^G, 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

- [18] **Gall, M.** (forthcoming on July 15, 2025). Why insurance companies are pulling out of California and Florida, and how to fix some of the underlying problems. In J. A. Horney (Ed.), *The Conversation on Extreme Weather*. John Hopkins University Press. https://doi.org/10.56021/9781421452012 [updated reprint]
- [17] Cutter, S.L., Gall, M., & Rubin, C. (2025). Foreshadowing the Future: What is Looming on the Horizon? In: S. L. Cutter, M. Gall, & C. Rubin (Eds.), U.S. Emergency Management in the 21st century: from disaster to catastrophe. (2nd ed., pp. 221-233). Routledge. https://doi.org/10.4324/9781003591900
- [16] Lakhina^{PP}, 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
- [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
- [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
- [11] Gerber, B., & **Gall, M**. (2018). Coal ash spill highlights key role of environmental regulations in disasters. *The Conversation*. September 20, https://theconversation.com/relaxed-environmental-regulations-heighten-risk-during-natural-disasters-103411

- [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
- [9] **Gall, M.**, Emrich, C. T., & Cutter, S. L.. (2015). Who Needs Loss Data? Background Paper for the Global Assessment Report on Disaster Risk Reduction 2015 (GAR15). Geneva, Switzerland: UNISDR. Available at http://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/University%20of%20South%20Carolina%202014.pdf; excerpts included in GFDRR, 2014. Understanding Risk in an Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment. Washington, D.C.: The World Bank, 224 p. Available at https://www.gfdrr.org/sites/gfdrr/files/publication/Understanding_Risk-Web_Version-rev_1.8.0.pdf
- [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/
- [5] Eller, W., Green^{PP}, D., & Fielding, W. J. (2011). Considering Animal Welfare: Implementing an Animal and Attitudinal Survey in Port-au-Prince, Haiti. *Monday Developments Magazine* 29 (1/1): 44-45.
- [4] **Gall^G, M.**, Zeil, P., Lang, S., Blaschke, T., Steinbruch^{CP}, F., & José^{CP}, F. (2002). Distribution of relief supplies to flood victims in Mozambique can remote sensing effectively contribute to disaster management? *Proceedings of the 2nd Workshop of the EARSeL Special Interest Group*, September 18-20, 2002, Bonn (Germany), pp. 87-94.
- [3] Steinbruch^{CP}, F., **Gall**^G, **M.,** & José^{CP}, 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**^G, **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**^G, **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):

SHELDUSTM data have been widely used in hundreds of peer-reviewed publications, dissertations and thesis, governmental and non-governmental reports.

- [28] CEMHS. (2025). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 23, available at https://sheldus.org.
- [27] CEMHS. (2024). Feeding America Workplace Resiliency Planning. Available at https://feeding-america-workplace-resiliency-planning-asu.hub.arcgis.com
- [26] CEMHS. (2024). Spatial Hazard Events and Losses Database for the United States (SHELDUS[™]), Version 22.
- [25] CEMHS. (2023). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 21.
- [24] Emrich, C., Gall, M. 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.

- [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^G, 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/OKnui5
- [20] **Gall, M.,** & Pinto^G, 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^G, 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.
- [16] CEMHS. (2019). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 18.1.
- [15] CEMHS. (2018). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 17.
- [14] CEMHS. (2018). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 16.1.
- [13] HVRI. (2017). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 16.
- [12] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 15.2.
- [11] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUS™), Version 15.1.
- [10] HVRI. (2016). Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 15.
- [9] HVRI. (2015). Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 14.1.
- [8] HVRI. (2015). Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 14.
- [7] HVRI. (2014). Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 13.1.
- [6] HVRI. (2014). Spatial Hazard Events and Losses Database for the United States (SHELDUSTM), Version 13.
- [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 (SHELDUSTM), Version 12.
- [3] HVRI. (2009). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 7.1.
- [2] HVRI. (2008). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 7.
- [1] HVRI. (2007). Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 6.1.

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-Pls: Nnenia Campbell (Bill Anderson Fund), Susan Cutter (Univ. of South Carolina), 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 (Purdue University)

co-PIs: Jianxi Su (Purdue), Petar Jevtic (ASU), and Melanie Gall

Period of Grant: Jun. 2022 – Dec. 2024; Amount: \$16,000, ASU portion: \$7,999

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 (UCF), Jacopo Baggio (UCF), Susan Cutter (Univ. of South Carolina), Melissa Daigle (LSU SeaGrant), Monica, Farris (UNO), Carol Friedland (LSU), Kelly Klima (Rand, Kristy Lewis (UCF), Natasha Mendoza (ASU), Michelle Miro (Rand), William O'Dell (UCF), Niki Pace (LSU SeaGrant), Colin Polsky (FAU), Benjamin Preston (Rand), Tamara Sheldon (Univ. of South Carolina), Sonia Stephens (UCF), Thomas Wahl (UCF), and James Wilkins (LSU SeaGrant)

Period of Grant: Oct. 2019 - Sep. 2024, Amount: \$3,403,554, ASU portion: \$386,363

2023 Society of Actuaries

Joint Loss Model for Convective Storm Property Damage: Matrix Variate Time Series

PI: Petar Jevtic (ASU) co-PI: Melanie Gall

Period of Grant: Apr. 2023 - Dec. 2023; Amount: \$20,667

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 (ASU)

co-PI: Melanie Gall

Period of Grant: Aug. 2022 - Dec. 2023; Amount: \$96,090

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, University of Iowa

Co-PI: Christopher Emrich (UCF), Carol Friedland (LSU), Melanie Gall, and Aaron Strong (Rand)

Period of Grant: Oct. 2019 - Sep. 2023, Amount: \$850,000, ASU portion: \$159,440

USAID 2021-2023

Disaster Response Review 2010-2020

PI: Melanie Gall

Co-PIs: Pamela DeLargy (ASU), and Marie Aquilino (ASU)

Period of Grant: Sep. 2021 – Jul. 2023; Amount: \$218,935

2020-2023 **Robert Wood Johnson Foundation**

> Cool Kids, Cool Places, Cool Futures: Community-based, arts-enhanced, and youthfocused approach for equitable urban cooling and emergency management

PI: Paul Coseo. ASU

Co-PIs: Wanda Dalla Costa (ASU), Katja Brundiers (ASU), and Maria Jackson (ASU) Other Personnel: Melanie Gall, Lauren Keeler, Michael Bernstein, Anne Reichman,

Jennifer Vanos, Ariane Middle, David Hondula, and Sara Merrow (all at ASU)

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,

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 (ASU) 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-Pls: Melanie Gall, Mounir el Asmar, Brian Gerber, Philip Horton, Mark Neveu, and David Sailor (all at ASU) Period of Grant: Sep. 2021 - May 2022; Amount: \$516,489 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 (Oklahoma State Univ.) Co-Pls: Nnenia Campbell (Bill Anderson Fun), Susan Cutter (Univ. of South Carolina), Melanie Gall, and Jamie Vickery (CU Boulder) Period of Grant: Dec. 2019 - Dec. 2022, Amount: \$220,000, ASU portion: \$35,006 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 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 (LSU) Co-PI: Melanie Gall, Robert Rohli (LSU), and T. Andrew Joyner (LSU) 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

Hermanth Venkateswara, and Lauren Withycombe Keller

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 (Univ. of South Carolina) Period of Grant: Aug. 2016 - Jul. 2018, Amount: \$592,915 2015-2017 National Oceanic and Atmospheric Administration (NOAA) 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 (UCF) 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 (Univ. of South Carolina) 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 (Univ. of South Carolina) and Melanie Gall Period of Grant: Jan 2015-May 2016, Amount: \$43,000 2015 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 (Univ. of South Carolina) and Melanie Gall Period of Grant: Jan. 2013 – Jun. 2014, Amount: \$46,978 2010-2012 Louisiana Sea Grant Changing flood mitigation: The Consequences of New Flood Insurance Rate Maps on Louisiana Coastal Communities PI: Melanie Gall (LSU) Co-PIs: M. Jude Egan (LSU), Rachel A. Dowty (LSU) and Daniel Monchuk (World Bank) 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 (LSU SeaGrant) Co-PI: Melissa Trosclair Daigle (LSU SeaGrant), Melanie Gall (LSU), and Charles A. Wilson (LSU SeaGrant) Period of Grant: May 2010 - May 2011, Amount: \$29,999 2010 Louisiana Department of Health & Hospitals H1N1 Program Evaluation PI: Melanie Gall (LSU) Co-PI: Brian J. Gerber, Warren Eller Period of Grant: Jun. – Jul. 2010, Amount: \$110,567 2009-2012 **National Science Foundation** Managing Evacuee Ingress – Network Interactions and Community Hosting Performance

PI: Brian J. Gerber (LSU)

2009-2010 Co-PI: Warren Eller (LSU), Melanie Gall (LSU), and Scott Robinson (Texas A&M)

Period of Grant: Sept. 2009 - Aug. 2012, Amount: \$320,048

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)

2009-2013 Co-PI: Melanie Gall

Period of Grant: Aug. 2009 - Feb. 2010 Amount: \$50,000

Louisiana Governor's Office of Homeland Security and Emergency Preparedness

Disaster Resistant University – Multi-Hazard Mitigation Plan for the LSU System

PI: Melanie Gall (LSU)

Period of Grant: Sept. 2009 - Feb. 2013, Amount: \$680,214

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 (UCF)

Co-PI: Melanie Gall (ASU), Thomas Wahl (UCF), Petar Jevtic (ASU)

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 and Natasha Mendoza (all at ASU)

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 **Pls**: Elizabeth Castillo, Mark Roseland, and **Melanie Gall** (all at ASU)

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 (ASU)

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 (all at ASU)

Period of Grant: April – September 2018, Amount: \$50,000

2018 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): ^{UG}undergraduate student, ^Ggraduate student, ^{PD}postdoctoral researcher, ^{CP}community partner, and ^{PP}public partner (government, NGO, industry).

- Fraser, R., M. Gall, B. Gerber, R. Parish, & R. Church. Experiential Learning in Public Service Education: Improving Student Understanding of Hazards, Disasters, and Community Resilience. NASPAA, Flagstaff, AZ.
- Tipaldo^G, J., H. Wilson Burns^G, D. Balk, D. Connor, M. Gall & L. M. Hunter. The Changing Demography of Disaster Impact in the US, 2012-2022. Population Association of America, Washington, D.C., April 10-15
- 2025 Friedland, C. & M. Gall. Future of flood resistant design and construction: perspectives from ASCE 24 and decision support tools. National Flood Association Scottsdale, AZ, April 6-8.
- 2025 Gall, M. Disasters and education: school closures disrupt more than learning. Northern California Earthquake Hazards Workshop, U.S. Geological Survey, January 28-30.
- Wahl, T., J. Ali^G, J. Morim^G, A. R. Enriquez^{PD}, 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^G. 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)
- Santos^G, C. D., E. Boyle^G, 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^G, C. Friedland, A. Rahim^G, 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^G, 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^G, J., T. Wahl, A. Enriquez^{PD}, M. Rashid^G, 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^G, E., M. Gall, & P. Jevtic. U.S. Disaster Normals. 20th 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)
- Zhou, Y. C. Emrich, & M. Gall. <u>Spatiotemporal variations of damaging thunderstorm-related hazards over the contiguous United States</u>. 2022 American Geophysical Union Fall Meeting, Chicago, IL. December 12-16.
- 2022 Emrich, C, C. Friedland, M. Gall & C. Polsky. <u>The New First Line of Defense: Building Community Resilience through Residential Risk Disclosure</u>. 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. <u>HazardAware:</u>

 <u>Democratizing Hazard, Risk, and Mitigation Information to Buy/Rent More Resilient Homes</u>. Friday
 Forum. Institute for Catastrophic Loss Reduction [Canada], Webinar, October 21.
- 2022 Gall, M. The Spatial Hazard Events & Losses Database for the United States. 24th 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. 24th Annual FEMA Higher-Ed Symposium, Emmitsburg, MD, June 6-9.
- 2022 Gall, M., C. Friedland, & P. Li^G. <u>The need for strategic hazard mitigation planning</u>. 43rd Annual Meeting of the Association for Public Policy Analysis and Management (APPAM), Austin, TX, March 27-29.
- Gall, M. *The value of estimating severe weather impacts*. <u>18th Annual Climate Prediction Applications Science Workshop</u>. 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^{PD}, S., M. Gall, & C. Foard. <u>County-level approaches to coastal Resilience: Trends, costs, and the importance of community wide efforts</u>. 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^G, R. B., C. J. Friedland, R. V. Rohli, M. Gall, & J. M. Gilliland^G. *Assessing Risk of Atmospheric Natural Hazards at the Census Block Level.* 115th 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.

 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 14th Annual Climate Predication 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*, 36th 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*, 36th 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^G, G., M. Gall^{PD}, 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^{PD}. *Is Vulnerability to Natural Hazards Measurable?* Department of Geography & Anthropology, Louisiana State University, Oct. 8, Baton Rouge, LA.
- 2007 Cutter, S. L. & M. Gall^G. *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^G. *The Geography of Disaster Losses*. National Climatic Data Center, Jul. 17, Asheville, NC.
- 2007 Gall^G, M. *Social Vulnerability Indices to Natural Hazards*, 103rd Ann. Mtg. of the Assoc. of Amer. Geogr., Apr. 17-21, San Francisco, CA.
- 2006 Gall^G, 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
- 2005 Cutter, S. L., J. T. Mitchell, B. J. Boruff, C. T. Emrich^G, M. Gall^G, M. C. Schmidtlein^G, C. Burton^G, and G. Melton^G. *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.

assessment tool? 102nd Ann. Mtg. of the Assoc. of Amer. Geogr., Mar. 7-11, 2006, Chicago, IL.

- 2004 Gall^G, 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^G, M. *Modeling 100-year Flood Risks in South Carolina, 28th Annual Hazards Research and Application Workshop, Jul. 13-16, Boulder, CO.*
- 2003 Gall^G, 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 Gall⁶, M. *Impactos das cheias 2000: Results of the Búzi River Basin*, Catholic University of Mozambique, Aug. 8, Beira, Mozambique.
- 2001 Gall^G, M. *Nach der Katastrophe ist vor der Katastrophe: GIS und Fernerkundung im Desastermanagement in Mosambik*, GIS Day 2001, Nov. 14, Salzburg, Austria.

TEACHING

COURSES Arizona State University

PAF 160 How to Survive the 21st 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)

PAF 551/CPP 510 Hazards Governance

CRD 590 Conference and Reading

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

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.) Alex 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 and post-doctoral advisor
- 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

- 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

PROFESSIONAL ACTIVITIES & SERVICE

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

SERVICE

SCIENTIFIC 2019-2024 Committee Member, World Meteorological Organization HIWeather Project; **COMMITTEES** 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 2025 Presenter, April 10, Member Initiated Meeting, Population Association of America TO WORKSHOPS 2025 Judge, March 1, Network of Schools of Public Policy, Affairs, and Administration AND MEETINGS (NASPAA) pandemic simulation competition 2024 Host, Organizer, and Fundraiser, 4th 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.

Hack Week, University of Washington, September 9-13.

2024 Participant and Data Provider; Disasters, Disparities, Demography, and Decisions (D4)

- 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, 3rd Fall Workshop of the Bill Anderson Fund. Tempe, AZ,
 October 12-14.
- 2022 Panelist, Session: <u>Frameworks for collaboration: communities and public universities</u>. July 14, National Hazard Mitigation Association Practitioners Workshop, Broomfield, CO.
- 2021 Host and Organizer, 2nd Fall Workshop of the Bill Anderson Fund, October 14-16, virtual.
- 2020 Host and Organizer, Inaugural <u>Fall Workshop</u> 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 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-present Member, Board of Directors, National Hazard Mitigation Association

	2020-present	Non-Voting Representative, Board of Directors, Arizona Voluntary
		Organizations Active in Disasters; development and maintenance of <u>AZ VOAD</u>
		COVID-19 coordination and situational awareness dashboard
	-	Lead of ASU academic partnership with the <u>Bill Anderson Fund</u>
	2023 and 201	, , , , , , , , , , , , , , , , , , , ,
		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-present	Reviewer, Gilbert F. White Thesis/Dissertation Award, Specialty Group
		"Hazards, Risks, and Disasters", American Association of Geographer
	2020	Member, Advisory Board, <u>Bill Anderson Fund Flagship</u> 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
	2010	Mapping Studies: Improving Methods and Map Outputs; PI: Alex de Sherbinin
	2010	Geospatial analysis support for the International Fund for Animal Welfare and
	2008	Animal Relief Coalition in Haiti
	2006	GIS support during Hurricane Gustav for East Baton Rouge Parish EOC, September 1-4.
	2007	Beta-tester for HAZUS-MH MR3
	2007	beta-testel for HAZOS-WITTWINS
UNIVERSITY/	2022-present	Member; Undergraduate Committee, School of Public Affairs, Arizona State
DEPARTMENTAL		University
SERVICE	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; Inclusive Strategies and Design 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
	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 2010-2011	Louisiana Sea Grant EDEN delegate (Extension Disaster Education Network) 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, Transdictioning and Systems, Approaches to
		Complex Systems: Transdisciplinary and Systems Approaches to Sustainable Infrastructure and Urban Development" (2024-2025) Natural Hazards Review, special issue on "Applying Machine Learning to Improve Natural Hazards Prediction and Mitigation" (2023-2024)
MANUSCRIPTS REVIEWED		Annals of the American Association of Geographers (2018-2019)
(PAST 5 YEARS)		Area (2019) Canadian Water Resources Journal (2022-2023) Climatic Change (2018-present) Computers, Environment, and Urban Systems (2015, 2018) Economics of Disasters and Climate Change (2024) Environmental Research: Climate (2022, 2023) Geosciences (2017-2020) International Journal of Emergency Management (2021) International Journal of Disaster Risk Reduction (2024)

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

Journal of Geography in Higher Education (2020-2021)

Journal of Homeland Security and Emergency Management (2023)

Nature Communications (2022) Nature Energy (2018, 2020)

Natural Hazards (2006-2020, 2025)

Natural Hazards and Earth Systems Sciences (2016-2020)

Natural Hazards Review (2004 to present)

Nature Sustainability (2018-2020)
Papers in Applied Geography (2024)

Proceedings of the Natural Academies of Sciences (PNAS) Nexus (2022)

Risk, Hazards and Crisis in Public Policy (2021)

Sociological Spectrum (2022)

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

BOOK PROPOSAL

WILEY (2025)

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
 Flood impact assessment, June 11-18, Búzi River Basin, Mozambique

SECTION: PROFESSIONAL DEVELOPMENT

PROFESSIONAL CERTIFICATES

Certified Floodplain Manager (CFM), Association of State Floodplain Managers (since 2012) [requires at least 16 CEUs for bi-annual renewal]

AND TRAINING E

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

 $\hbox{E/L/G-300 Intermediate Incident Command System for Expanding Incidents}\\$

(ICS), 24 CEU, 2025

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

E/L/G-400 Advanced Incident Command System, 16 CEU, 2025

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, 16 CEU, 2019

Academic Training:

Faculty Mentoring Workshop, Arizona State University, 2025

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, NAIADE

Text analysis software: NVivo, Maxqda

Programming languages: HTML

Course management systems: Canvas, Blackboard, Moodle, and D2L

Miscellaneous: Tableau, Overleaf/LaTeX

Languages: English, German

MEMBERSHIPS & American Association of Geographers (AAG)

AFFILIATIONS 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	2024
ENGAGEMENTS	

- 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/innarticle/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)

interviewed by Marshall Terrill, ASU News (October 3),

https://news.asu.edu/20241003-environment-and-sustainability-lessons-helene-asu-professors-explain-complexities-behind

- interviewed by Elizabeth Miller on background, Climate Central (May 23)
- interviewed and quoted by Susanne Wedlich "Der Bereich Katastrophenschäden ist ein Kerngeschäftsfeld für uns und ein Wachstumsmarkt!" [The area of catastrophe damage is a core business area for us and a growth market!] (online, January 9),
 - https://www.riffreporter.de/de/umwelt/rueckversicherung-und-immerhoehere-klimaschaeden-durch-naturkatastrophen
- featured on Bloomberg's Odd Lots (Joe Weisenthal and Tracy Alloway), (podcast, September 8)
 - interviewed by Charlie Shield on climate risk, insurance, and adaptation, featured on Living Planet, DW Deutsche Welle (audio story, September 8), https://beta.prx.org/stories/487696
 - Interviewed by Mary Mays on background, Weather & Radar (August 25)
 - interviewed by John Hintze on background, Risk & Analysis (print, June 29), interviewed by Adrian Ma on NPR's The Indicator from Planet Money "Whe
 - interviewed by Adrian Ma on NPR's The Indicator from Planet Money "When Insurers Can't Get Insurance", (podcast, June 22), https://www.npr.org/2023/06/22/1183854206/when-insurers-cant-get-insurance
 - interviewed by Sophie Quinton on background, Pluribus News, for "Calif. legislators consider 'catastrophe modeling' to address insurance crisis" (print, June 16), https://pluribusnews.com/news-and-events/calif-legislators-consider-catastrophe-modeling-to-address-insurance-crisis/
 - interviewed and quoted by Talib Visram, Fast Company, for "Florida's property insurance is in crisis. And it's not just about the hurricanes" (print, June 14), https://www.fastcompany.com/90907815/floridas-property-insurance-is-in-crisis-and-its-not-just-about-the-hurricanes
 - provided SHELDUS data for visualization "Accounting for flood risk would lower American house prices by \$187bn", The Economist (print, April 25), https://www.economist.com/graphic-detail/2023/04/25/accounting-forflood-risk-would-lower-american-house-prices-by-187bn
 - interviewed and quoted by Jo Harper, Deutsche Welle, for "Turkey earthquake: How are the true costs calculated?" (print, February 23),

 https://www.dw.com/en/turkey-earthquake-how-are-the-true-costs-calculated/a-64779533; republished by Taiwan News

2020	interviewed for "Responding to a Pandemic" for Devils in the Details, Arizona State
	University News (video, May 22), https://youtu.be/ldL809FLtTE
	interviewed by Mary Beth Faller for ASU News "ASU creates tool to link nonprofit
	agencies during pandemic response" (online, May 8),
	https://news.asu.edu/20200508-arizona-impact-asu-creates-tool-link-
	nonprofit-agencies-during-pandemic-response
2019	interviewed by Mary Beth Faller for ASU News "ASU professors to help Gulf Coast
	communities assess climate risks", (December 13),
	https://news.asu.edu/20191213-solutions-asu-professors-help-gulf-coast-
	communities-assess-climate-risks
2015	interviewed and quoted by Phil McKenna, Inside Climate News, for "500-year floods
	coming to New York every 24 years, study says" (print, September 28),
	https://insideclimatenews.org/news/28092015/new-york-epic-floods-
	climate-change-hurricanes/
	interviewed and quoted by Lisa Song, Inside Climate News, for "Most extreme
	weather has climate change link, study says" (print, June 23),
	https://insideclimatenews.org/news/23062015/most-extreme-weather-has-
	climate-change-link-study-says-global-warming-trenberth-ncar-sea-levels/
2011	interviewed by Brandon Richards, KPLC-TV, for "LSU study to look at impact of flood
	insurance in SWLA" (TV, February 20),
	https://www.kplctv.com/story/14065675/lsu-students-look-at-impact-of-
	flood-insurance-in-swla/