# MELANIE GALL, PH.D., CFM

		r for Eme land Secu	ergency Management and urity	Arizona State University Office: (602) 496-1040		
	Schoo	l of Publi	c Affairs	email: melanie.gall@asu.edu		
AREAS OF	Natura	al hazard	s and disasters	Disaster losses		
SPECIALIZATION	Risk m	netrics an	d indices	Environmental justice		
Vulnerability a		rability ar	nd resilience	Applied GIS and remote sensing		
			ion and risk reduction	Emergency management		
EDUCATION	2007	Ph.D. U	niversity of South Carolina, Ge	ography		
		"Indices	of Social Vulnerability to Natural Hazards: A Comparative Evaluation"			
	2002			Susan L. Cutter		
	2002		iversity of Salzburg (Austria), (			
			Multicriteria Decision Making in Disaster Management: The Identification Emergency Shelters in the Búzi and Save River Basin (Mozambique)"			
		Advisor	Josef Strobl			
	1999					
	1998			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			
			Arizona State University			
	2017-	2022	Research/Clinical Professor (non-tenure track), co-Director, Center for			
	2017	2022	Emergency Management & Homeland Security (CEMHS)			
			Affiliate Faculty, School of Geographical Sciences and Urban Planning			
	2013-2016 2013-2014		Arizona State University			
			Research Assistant Professor (non-tenure track),			
			Hazards & Vulnerability Research Institute, University of South Carolina Program Faculty, Emergency Management & Homeland Security Leadership Program, Portland State University			
	2012-	2013	Visiting Assistant Professor			
			Department of History & Soc	•		
	2008-	2013	Assistant Professor – Research (non-tenure track) and Director of the			
			Disaster Science and Management Center, Department of Geography &			
			Anthropology, Louisiana Stat	e University; Affiliate at the Stephenson Disaster		
			Management Institute			
	2007-	2008	Postdoctoral Fellow			
	2000/2001		Hazards & Vulnerability Rese	arch Institute, University of South Carolina		
			Junior Technical Expert			
			Centro da Investigação e Dod	cumentaçao para Desenvolvimento Integral		
			(CIDDI-GIS), Catholic Univers	ity of Mozambique at Beira		
	1995-1997		SICAD Technician, Photogrammetrie München, Heidelberg (Germany)			
				<u> </u>		

2022-present	Impact Scholar, Knowledge Exchange for Resilience, Arizona State University
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
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 2002 – 2007	International Peace Scholarship, P.E.O. Sisterhood Tuition Scholarship, University of South Carolina
	2020 2018 2014 2009 2004 2004 2003 – 2005

#### **SECTION: RESEARCH**

#### **PUBLICATIONS**

GOOGLE SCHOLAR CITATIONS: 2,477, H-INDEX: 22, I10-INDEX: 29

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., M. Gall, and C. Rubin (eds.). U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe. 2<sup>nd</sup> edition. Routledge [in progress and under contract, anticipated release 2025].

#### Peer-reviewed Journal Publications

- Taghinezhad<sup>G,</sup> T., A. Al Assi<sup>G</sup>, C. J. Friedland, C. T. Emrich, Md A. Rahim, **M. Gall**, R. B. Mostafiz<sup>PD</sup>, R. V. Rohli. Flood risk and mitigation calculator tool to Support Residents and Decision-Makers to Make Communities More Resilient. *Frontiers in Environmental Science*. [IF: 4.6] [under review]
- Delos Santos<sup>G</sup>, C., E. Boyle<sup>G</sup>, P Jevtic, and **M. Gall**. Effects of Natural Hazards on Spatio-Temporal Patterns of Violent Crime in the United States. *Natural Hazards* [IF: 3.9] [under review]
- Zhou, Y, **M. Gall**, and C. T. Emrich. Knowing more about losing more: Exploring spatial-temporal patterns of damaging thunderstorm-related events in the contiguous United States. *Bulletin of the American Meteorological Society* [IF: 9.116] [under review]
- **Gall, M.,** P. Li<sup>G</sup>, and C. J. Friedland [revise and resubmit]. Strategic Hazard Mitigation Planning. *Public Administration Review* [IF: 4.063].
- Lawrence, K., M. Sweeney, E. Werder, C. Zuzak<sup>PP</sup>, **M. Gall**, C. Emrich, F. Cochran, X. Deng, W. B. Jackson II, K. Christenbury, L. Engel, and D. Sandler [revise and resubmit]. Residential natural hazard risk and adverse mental health outcomes. American Journal of Epidemiology. [IF: 5.363]
- [23] Javed<sup>G</sup>, A., T. Wahl, A. R. Enriquez<sup>PD</sup>, Md M. Rashid<sup>G</sup>, J. Morim<sup>G</sup>, **M. Gall**, C. T. Emrich [forthcoming]. The Role of Compound Climate and Weather Extreme Events in Creating Socio-economic Impacts in South Florida. *Weather and Climate Extremes*. [IF: 8.06]
- [22] Andresen, A.<sup>G</sup>, L. Kurtz<sup>G</sup>, D. Hondula, S. Meerow, and **M. Gall**. 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: 6.947]

- [21] Mostafiz, R., R. V. Rohli, C. J. Friedland, **M. Gall**, and N. Bushra<sup>G</sup>. 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: 5.411]
- [20] **Gall, M.**, T. Sheldon, and L. Collins. 2022. The economic impact of disaster-related school closures. *Risks, Hazards, and Crisis in Public Policy* 13(3): 255-276. <a href="https://doi.org/10.1002/rhc3.12242">https://doi.org/10.1002/rhc3.12242</a> [IF Scopus: 3.372]
- [19] Hu, M. D., K. G. Lawrence, M. Gall, C. T. Emrich, M. R. Bodkin, W. B. Jackson, N. MacNell, R. K. Kwok, L. S. Engel, and D. P. Sandler. 2021. Natural Hazards and Mental Health among US Gulf Coast Residents. *Journal of Exposure Science and Environmental Epidemiology* 31(5): 842-851. <a href="https://doi.org/10.1038/s41370-021-00301-z">https://doi.org/10.1038/s41370-021-00301-z</a> [IF: 6.371]
- [18] Mostafiz, R, C. J. Friedland, R. V. Rohli, **M. Gall**, N. Bushra<sup>G</sup>, and J. M. Gilliland<sup>G</sup>. 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. <a href="https://doi.org/10.3389/feart.2020.601624">https://doi.org/10.3389/feart.2020.601624</a>. [IF: 3.661]
- [17] **Gall, M.** and Carol J. Friedland. 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 [IF: 4.2]
- [16] de Sherbinin, A., A. Bukvic, G. Rohat, M. Gall, B. McCusker, B. Preston, A. Apotsos, C. Fish, S. Kienberger, P. Muhonda, O. Wilhelmi, D. Macharia, W. Shubert, R. Sliuzas, B. Tomaszewski, and S. Zhang. 2019. Climate change vulnerability mapping: a systematic review and recommendations for the future. WIRES Climate Change. <a href="https://doi.org/10.1002/wcc.600">https://doi.org/10.1002/wcc.600</a> [IF: 10.072]
- [15] Cutter, S.L., Emrich, C.T., **M. Gall**, and R. Reeves. 2018. Flash flood risk and the paradox of urban development. *Natural Hazards Review* 19(1): online. [IF: 4.2]
- [14] Cutter, S. L. and M. Gall. 2015. Sendai Targets at Risk. Nature Climate Change 5(8): 707-709.
- [13] **Gall, M.**, K. H. Nguyen<sup>G</sup>, and S. L. Cutter. 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: 4.842]
- [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: 0.972]
- [11] Robinson, S. E., Brian J. Gerber, W. S. Eller, and **M. Gall**. 2013. Emergency planning and disabled populations: assessing the FNSS approach. *International Journal of Mass Emergencies and Disasters* 31(2): 315-329.
- [10] Robinson, S. E., W. S. Eller, **M. Gall**, and B. J. Gerber. 2013. The core and periphery of emergency management networks. *Public Management Review* 15(3): 344-362. [IF: 6.004]
- [9] Friedland, C. J. and **M. Gall**. 2012. True cost of hurricanes case for a comprehensive understanding of multihazard building damage. *Leadership and Management in Engineering* 12(3): 134-146. [IF: 7.88]
- [8] Fielding, W. J., **M. Gall**, D. Green<sup>PP</sup>, and W. S. Eller. 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: 1.633]
- [7] **Gall, M.**, K. A. Borden, C. T. Emrich, and S. L. Cutter. 2011. The Unsustainable Trend of Natural Hazard Losses in the United States. *Sustainability* 3(11): 2157-2181 (DOI: 10.3390/su3112157). [IF: 3.889]
- [6] Melton<sup>G</sup>, G., M. Gall, J. T. Mitchell, and S. L. Cutter. 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: 3.158]
- [5] **Gall, M.**, K. Borden<sup>G</sup>, and S. L. Cutter. 2009. When do losses count? Six fallacies of loss data from natural hazards. *Bulletin of the American Meteorological Society* 90(6): 1-11. [IF: 9.116]
- [4] **Gall**<sup>G</sup>, **M.**, B. J. Boruff, and S. L. Cutter. 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., C. T. Emrich<sup>G</sup>, J. T. Mitchell, B. J. Boruff, **M. Gall**<sup>G</sup>, M. Schmidtlein<sup>G</sup>, C. Burton<sup>G</sup>, and G. Melton<sup>G</sup>. 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: 3.311]
- [1] **Gall**<sup>G</sup>, **M.**, S. Lang, and P. Zeil. 2001. After a catastrophe is before a catastrophe: GIS and remote sensing in emergency management in Mozambique [in German]. *GeoBIT/GIS* 11 (2001): 14-16.

### Peer- Reviewed Book Chapters

- Clark, S. S., and M. Gall. Extreme temperatures. In: Cutter, S.L., M. Gall, and C. Rubin (eds.). U.S. Emergency Management in the 21<sup>st</sup> century: from disaster to catastrophe. 2<sup>nd</sup> edition. Routledge [in progress and under contract, anticipated release 2025].
- [12] Hayden, M. et al. (forthcoming). Human Health. In: *Fifth National Climate Assessment*. Washington, D.C.: U.S. Global Change Research Program. <a href="https://www.globalchange.gov/nca5">https://www.globalchange.gov/nca5</a> (role: technical contributor)
- [11] Gerber, B. J, C. Provost and **M. Gall** (forthcoming). Environmental Governance in Western Europe: A Comparative Assessment of Local Sustainability Practices in the Presence of Climate Change Vulnerability. In: Handbook of Environmental Governance, edited by A. Sapat. Routledge: New York, NY.
- [10] **M. Gall** and S. L. Cutter (forthcoming). Hurricane Katrina: a failure of planning or planned failure? [in German] In *Naturrisiken und Sozialkatrastrophen* (2<sup>nd</sup> ed.), edited by C. Felgentreff and T. Glade. Heidelberg: Spektrum Akademischer Verlag.
- [9] National Academies of Sciences, Engineering, and Medicine. 2019. Building and Measuring Community Resilience. Washington, D.C.: National Academies Press. (Committee Member)

  <a href="https://www.nap.edu/catalog/25383/building-and-measuring-community-resilience-actions-for-communities-and-the">https://www.nap.edu/catalog/25383/building-and-measuring-community-resilience-actions-for-communities-and-the</a>
- [8] **Gall, M.** 2019. Loss reduction and sustainability. In: From Disaster to Catastrophe: U.S. Emergency Management in the 21st Century, edited by C. Rubin and S.L. Cutter. New York, NY: Routledge: 209-232.
- [7] **Gall, M.** and S. L. Cutter. 2019. 2005 Events and Outcomes: Beyond Hurricane Katrina. In: Emergency Management: The American Experience (3rd ed.), edited by C. B. Rubin. Fairfax, VA: CRC, 191-217.
- [6] **Gall, M.** 2017. Direct and Insured Flood Damage in the United States. In: Flood Damage Survey and Assessment: New Insights from Research and Practice, edited by D. Molinari, S. Menoni, and F. Ballio. American Geophysical Union and Wiley: Washington, DC: 53-64.
- [5] **Gall, M.** and B. Gerber. 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: *Disasters & Development: Examining Global Issues and Cases*, edited by N. Kapucu and K. T. Liou. New York, NY: Springer, 213-234.
- [4] **Gall, M.** and S. L. Cutter. 2012. 2005 Events and Outcomes: Beyond Hurricane Katrina. In: *Emergency Management: The American Experience 1900-2010 (2<sup>nd</sup> ed.)*, edited by C. B. Rubin. Fairfax, VA: Public Entity Risk Institute (PERI), 191-212. (2008 Book Prize by the American Society for Public Administration, Section on Environment and Natural Resources Administration/SENRA)
- [3] **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.
- [2] Cutter, S. L., **M. Gall<sup>PD</sup>**, and C. T. Emrich. 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.
- [1] 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 <a href="http://www.climatescience.gov/Library/sap/sap3-3/final-report/default.htm">http://www.climatescience.gov/Library/sap/sap3-3/final-report/default.htm</a>.

#### **Commissioned Publications**

- [18] Smith-Heisters, S., M. Aquilino, S. Yu<sup>G</sup>, **M. Gall**, E. Bienenstock, and M. Temes<sup>G</sup>. 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., T. Bao, **M. Gall**, and P. Jevtić. 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., C. T. Emrich, **M. Gall**, S. Harrison, R. McCaster, S. Derakhshan<sup>G</sup>, and E. Pham<sup>G</sup>. 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., L. Ritchie, **M. Gall**, and S. L. Cutter. 2019. Relief, Recovery, and Resilience Network Initiative Final Report. Feeding America/Margaret A. Cargill Philanthropies.
- [12] Campbell, N., L. Ritchie, M. Gall, and S. L. Cutter. 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.**, N. Campbell, S. L. Cutter and L. Ritchie. 2017. Disaster Planning for Food Banks: Literature Review. Chicago, IL: Feeding America. <a href="https://arcg.is/0Knui5">https://arcg.is/0Knui5</a>
- [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.

  <a href="http://centralmidlands.org/publications/free-documents.html">http://centralmidlands.org/publications/free-documents.html</a>
- [9] IRDR. 2014. Peril Classification and Hazard Glossary (IRDR AIRDR Publication No. 1). Beijing, China: Integrated Research on Disaster Risk (IRDR). Available at <a href="https://www.irdrinternational.org/uploads/files/">https://www.irdrinternational.org/uploads/files/</a> 2020/08/sxztCDwe0VzI4m6Ug3VLjkXSnh9vUAngozmPYAkp/IRDR\_DATA-Project-Report-No.-1.pdf
- [8] Gall, M., S. L. Cutter, and K. Nguyen<sup>G</sup>. 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 <a href="http://www.irdrinternational.org/2015/01/28/airdr-report-no-2/">http://www.irdrinternational.org/2015/01/28/airdr-report-no-2/</a>
- [7] **Gall, M.**, S. L. Cutter, and K. Nguyen<sup>G</sup>. 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 <a href="http://www.irdrinternational.org/2015/01/29/airdr-report-no-3">http://www.irdrinternational.org/2015/01/29/airdr-report-no-3</a>
- [6] Gall, M., S. L. Cutter, and K. Nguyen<sup>G</sup>. 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 <a href="http://www.irdrinternational.org/2015/01/30/airdr-report-no-4/">http://www.irdrinternational.org/2015/01/30/airdr-report-no-4/</a>
- [5] Gall, M., C. Friedland, T. A. Joyner<sup>G</sup>, R. Orgera<sup>G</sup>, C. Fu<sup>G</sup>, and S. Ogea<sup>G</sup>. 2013. Disaster Resistant University Multi-Hazard Mitigation Plan. Baton Rouge, LA: Louisiana State University System, 970 p. Available at <a href="http://dsm.lsu.edu/pr hazmit.htm">http://dsm.lsu.edu/pr hazmit.htm</a>.
- [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.** and S. Kreft<sup>PP</sup>. 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 <a href="http://lossanddamage.net/4829">http://lossanddamage.net/4829</a>
- [2] Cutter, S. L., G. Melton<sup>G</sup>, and **M. Gall**. 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**<sup>G</sup>, **M.** and S. L. Cutter. 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 <a href="http://www.iwr.usace.army.mil/inside/products/pub/pubsearchAll.cfm?alpha=N">http://www.iwr.usace.army.mil/inside/products/pub/pubsearchAll.cfm?alpha=N</a>.

#### Other Publications

- [16] Lakhina<sup>PP</sup>, S. J., **M. Gall**, and M. Sanders. 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, <a href="https://theconversation.com/flood-risk-ratings-translating-risk-to-future-costs-helps-homebuyers-and-renters-grasp-the-odds-186798">https://theconversation.com/flood-risk-ratings-translating-risk-to-future-costs-helps-homebuyers-and-renters-grasp-the-odds-186798</a>
  Republished in Yahoo News, Mountain Journal, and others
- [14] Hale, M. and **M. Gall**. 2022. Foreword. In: *Creating Inclusive and Engaging Online Courses: A Teaching Guide*, M. Sanders (ed.). Northampton, MA: Elgar Publishing.
- [13] **Gall, M.,** C.T. Emrich, and M. Aquilino. 2022. Flood risk ratings: Translating risk to future costs helps homebuyers and renters grasp the odds. *The Conversation*. July 28, <a href="https://theconversation.com/flood-risk-ratings-translating-risk-to-future-costs-helps-homebuyers-and-renters-grasp-the-odds-186798">https://theconversation.com/flood-risk-ratings-translating-risk-to-future-costs-helps-homebuyers-and-renters-grasp-the-odds-186798</a>
- [12] Gerber, B. and **M. Gall**. 2021. One month in, how Biden has changed disaster management and the US COVID-19 response. *The Conversation*. February 18, <a href="https://theconversation.com/one-month-in-how-biden-has-changed-disaster-management-and-the-us-covid-19-response-155440">https://theconversation.com/one-month-in-how-biden-has-changed-disaster-management-and-the-us-covid-19-response-155440</a>
- [11] Gerber, B. and **M. Gall**. 2018. Coal ash spill highlights key role of environmental regulations in disasters. *The Conversation*. September 20, <a href="https://theconversation.com/relaxed-environmental-regulations-heighten-risk-during-natural-disasters-103411">https://theconversation.com/relaxed-environmental-regulations-heighten-risk-during-natural-disasters-103411</a>
- [10] **Gall, M.** and S. L. Cutter. 2016. Understanding Disaster Risk Through Loss Data. Input to Scoping report for and Open Risk Data and Modelling Report. Understanding Risk Network. <a href="https://www.gfdrr.org/sites/default/files/solving-the-puzzle-contributions.pdf">https://www.gfdrr.org/sites/default/files/solving-the-puzzle-contributions.pdf</a>
- [9] Gall, M., C. T. Emrich and S. L. Cutter. 2015. Who Needs Loss Data? Background Paper for the Global Assessment Report on Disaster Risk Reduction 2015 (GAR15). Geneva, Switzerland: UNISDR. Available at <a href="http://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/University%20of%20South%20Carolina%202014.pdf">http://www.preventionweb.net/english/hyogo/gar/2015/en/bgdocs/University%20of%20South%20Carolina%202014.pdf</a>; 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 <a href="https://www.gfdrr.org/sites/gfdrr/files/publication/Understanding Risk-Web Version-rev 1.8.0.pdf">https://www.gfdrr.org/sites/gfdrr/files/publication/Understanding Risk-Web Version-rev 1.8.0.pdf</a>
- [8] Guha-Sapir, D., R. Davis, **M. Gall**, P. Wallemacq, and S. L. Cutter. 2015. Exploring the potential of geocoding the impact of disasters: The experience of global and national databases. Geophysical Research Abstracts 17, EGU-2015-15109.
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- [3] Steinbruch<sup>CP</sup>, F., **M. Gall**<sup>G</sup>, and F. José<sup>CP</sup>. 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 <a href="http://www.zgis.at/projects/Flame/">http://www.zgis.at/projects/Flame/</a>.
- [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 <a href="http://www.zgis.at/projects/Flame/">http://www.zgis.at/projects/Flame/</a>.

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

- [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 <a href="https://arcg.is/0XeaWu0">https://arcg.is/0XeaWu0</a>
- [21] **Gall, M.** and N. Pinto<sup>G</sup>. 2021. *Feed Your Community, Plan for Disasters*; a disaster preparedness planning tool for food banks funded by Feeding America, available at <a href="https://arcg.is/OKnui5">https://arcg.is/OKnui5</a>
- [20] **Gall, M.** and N. Pinto<sup>G</sup>. 2021. *HDxCC Project Dashboard*; a practitioner-student project exchange website funded by the Federal Emergency Management Agency, available at <a href="https://arcg.is/GPuaT">https://arcg.is/GPuaT</a>
- [19] **Gall, M.** 2020. *COVID-19 Recovery Dashboard for Social Safety Net Services Coalition* (Coconino County, AZ), available at <a href="https://arcg.is/1n8LHi">https://arcg.is/1n8LHi</a>
- [18] Roseland, M., E. Castillo, M. Gall, and N. Pinto<sup>G</sup>. 2020. Sustainable Maryvale: Using Community Capital to Localize the Sustainable Development Goals, available at <a href="https://arcg.is/88iuq0">https://arcg.is/88iuq0</a>
- [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 <a href="https://sheldus.org">https://sheldus.org</a>.
- [15] CEMHS. 2018. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 17, available at <a href="https://sheldus.org">https://sheldus.org</a>.
- [14] CEMHS. 2018. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 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 <a href="https://sheldus.org">https://sheldus.org</a>.
- [11] HVRI. 2016. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 15.1, available at <a href="https://sheldus.org">https://sheldus.org</a>.
- [10] HVRI. 2016. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 15, available at <a href="https://sheldus.org">https://sheldus.org</a>.

- [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 <a href="https://sheldus.org">https://sheldus.org</a>.
- [7] HVRI. 2014. Spatial Hazard Events and Losses Database for the United States (SHELDUS), Version 13.1, available at <a href="https://sheldus.org">https://sheldus.org</a>.
- [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 <a href="http://hvri.geog.sc.edu/sheldus/koshland/index.html">http://hvri.geog.sc.edu/sheldus/koshland/index.html</a>
- [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-Pls: 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-Pls: Jianxi Su, Petar Jevtic, and Melanie Gall

Period of Grant: Jun. 2022 – Dec. 2023; 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-Pls:** 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. 2022, 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. 2022, 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 youthfocused approach for equitable urban cooling and emergency management PI: Paul Coseo, ASU Co-PIs: Wanda Dalla Costa, Katja Brundiers, 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-Pls: 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) HellHivesTM for ADAPT PI: Brian Gerber, ASU Co-Pls: 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 Arizona Division of Emergency Management 2016-2018 **FY 2017 EMGP** PI: Allen Clark, ASU Co-PI: Melanie Gall Period of Grant: Aug. - 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) 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 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 Caorlina Period of Grant: Jan-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 Caorlina

Period of Grant: Jan. – Jun. 2014, Amount: \$46,978

2009-2013 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. 2013 - Feb. 2014, Amount: \$50,000

2009-2012 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

2010-2012 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

2010-2011 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 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** 

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 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).

- 2023 Gall, M. and E. Boyle<sup>G</sup>. U.S. Disaster Normals. 2023 American Geophysical Union, San Francisco, CA, December 11-15, 2023.
- 2023 Mostafiz, R., A. Al Assi<sup>G</sup>, C. Friedland, A. Rahim<sup>G</sup>, R. Rohli, C. Emrich, and 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, and 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.
- 2023 Ali<sup>G</sup>, J., T. Wahl, A. Enriquez<sup>PD</sup>, M. Rashid<sup>G</sup>, M. Gall, and 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., and 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], virtual presentation, June 28.
- 2023 Helmrich, A., B. Gerber, M. Gall, and 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, and 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. 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.
- 2022 Zhou, Y. C. Emrich, and 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 and 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, and T. Wahl. <a href="HazardAware: Democratizing Hazard, Risk">HazardAware: Democratizing Hazard, Risk</a>, and <a href="Mitigation Information to Buy/Rent More Resilient Homes">Mitigation Information to Buy/Rent More Resilient Homes</a>. Friday Forum. Institute for Catastrophic Loss Reduction [Canada], Webinar, October 21.
- 2022 Gall, M. The Spatial Hazard Events and 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, and 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, and P. Li<sup>G</sup>. <u>The need for strategic hazard mitigation planning</u>. 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*. <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<sup>PD</sup>, S., M. Gall, and 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. and 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. and B. Gerber. Responding to a pandemic. Devils in the Details. https://youtu.be/ldL809FLtTE
- 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., and 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>G</sup>, R. B., C. J. Friedland, R. V. Rohli, M. Gall, J. M. Gilliland<sup>G</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. NAS/Gulf Research Program Opportunity Analysis Meeting on Tracking Community Resilience, February 15-16, Washington, DC.
- 2016 Sheldon, T., M. Gall, and 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 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, and 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. and 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., and 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. and 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. and 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
- 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.

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

- 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.

### **SECTION: TEACHING**

**COURSES** Arizona State University

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 Geographic Information Systems (GIS) and Analysis (new online

#### course)

[note: 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

CPM 3.1 Risk Management (Certified Public Manager program)

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

# 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

#### **Arizona State University**

#### **ADVISING**

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

PhD committee member

2023 (exp.) Danielle Jacobs, Computation and Augmented Intelligence

PhD committee

2023 (exp.) Peiyao Li, Community Resources and Development,

PhD committee member

2023 (exp.) Philip Gilbertson, Geospatial Sciences and Urban Planning,

PhD committee member

2023 Esther Boyle, Mathematics and Statistical Sciences, 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

# University of South Carolina

member

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	Devvani 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

# **SECTION: SERVICE**

#### PROFESSIONAL ACTIVITIES & SERVICE

PROFESSIONAL A	ONAL ACTIVITIES & SERVICE		
SCIENTIFIC 2019-present COMMITTEES		Chair, Membership Committee Member, Board of Directors (2019-2021) North American Alliance of Hazards and Disaster Research Institutes (NAAHDRI), Boulder, USA	
	2017-present	Committee Member, World Meteorological Organization HIWeather Project; Impacts, Vulnerability & Risk Task Team (IVR-TT) and Warning Value Chain Working Group (since November 2020)	
2017-2019		Committee Member, Consensus Report on <u>Building and Measuring</u> 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	
TO WORKSHOPS			
·		, Session: Frameworks for collaboration: communities and public universities.  National Hazard Mitigation Association Practitioners Workshop, Broomfield,	

- 2021 Host and Organizer, Fall Workshop of the Bill Anderson Fund, October 14-16, virtual.
- 2020 Host and Organizer, 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 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.

COM	VIU	NI	ı	Y
SERVI	CE			

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 <u>AZ VOAD</u>			
	COVID-19 coordination and situational awareness dashboard			
2020-	Lead of ASU academic partnership with the Bill Anderson Fund			
2023 and 201	17-2018 Member, Planning Committee, State Hazard Mitigation Plan,			
	Department of Emergency and Military Affairs (DEMA)			
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 2017	GIS support for City of Phoenix, ESF#5, National Mass Care Exercise (May 21) American Geophysical Union (AGU) OSPA Session Mentor
	2017	Development and Maintenance of web-based map for Florida VOADs (Hurricane Irma)
	2017 2016-2017	Social Vulnerability and Resilience Working Group, National Risk Index SESYNC Pursuit Project: Meta-Analysis of Climate Change Vulnerability 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	2023	Member; Diversity, Equity, and Inclusion Committee, School of Public Affairs, Arizona State University
SERVICE	2023	Member; Search Committee, School of Public Affairs, Arizona State University
	2022-	Member; Undergraduate Committee, School of Public Affairs, Arizona State University
	2019-	Advisor; Emergency Management Student Association (EMSA), 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	Louisiana Sea Grant EDEN delegate (Extension Disaster Education Network)
	2010-2011	LSU Dept. of Geography & Anthropology speaker's committee

PROPOSAL Arizona Department of Emergency and Military Affairs (2017-2019, 2023)

REVIEWER National Science Foundation (2010, 2012, 2014, 2020)

PAST 5 YEARS U.S. Department of Homeland Security (2012, 2020)

U.S. Department of Education (2011, 2013-2016)

European Commission Joint Programming Initiative on Cultural Heritage (2018)

Mississippi-Alabama Sea Grant (2014-present)

National Academies of Sciences, Gulf Research Program (2019)

UK Research and Innovation (2020)

Wisconsin Sea Grant (2015) Washington Sea Grant (2019)

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

Natural Hazards Review, special issue on "Applying Machine Learning to Improve Natural

Hazards Prediction and Mitigation" (2023-2024)

AIMS Urban Resilience and Sustainability (editorial board member since 2022)

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

**REVIEWED** Area (2019)

(Past 5 Years) Canadian Water Resources Journal (2022-2023)

Climate Risk Management (2018) Climate Change (2018, 2020, 2023)

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)

Journal of Homeland Security and Emergency Management (2023)

Nature Communications (2022) 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)

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

Regional Environmental Change (2018) Risk, Hazards and Crisis in Public Policy (2021)

Sociological Spectrum (2022) Southeastern Geographer (2018)

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

**BOOK REVIEWER** Routledge (2018)

Oxford University Press (2017)

Elsevier (2012) Earthscan Ltd. (2009)

Taylor & Francis Group (2020)

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** Certified Floodplain Manager (CFM), Association of State Floodplain Managers (since 2012)

**CERTIFICATES** Emergency Management Training:

**AND 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, 2010

IS-42 Social Media in Emergency Management, 2013

IS-100.a Introduction to the Incident Command System, 2008 IS-200.a ICS for Single Resources and Initial Action Incidents, 2008

IS-242.a Effective Communication, 2013

IS-271.a Anticipating Hazardous Weather and Community Risk, 2013

IS-328 Plan Review for Local Mitigation Plans, 2014

IS-386 Introduction to Residential Coastal Construction, 2015

IS-393.a Introduction to Hazard Mitigation, 2011 IS-700 National Incident Management System, 2008

IS-800.b Introduction to the National Response Framework, 2008

IS-805 Emergency Support Function #5 – Emergency Management, 2008

IS-922 GIS and Emergency Management, 2017

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, 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 APPEARANCES**

- 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), <a href="https://beta.prx.org/stories/487696">https://beta.prx.org/stories/487696</a>
  - 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 "When Insurers Can't Get Insurance", (podcast, June 22), <a href="https://www.npr.org/2023/06/22/1183854206/when-insurers-cant-get-insurance">https://www.npr.org/2023/06/22/1183854206/when-insurers-cant-get-insurance</a>
  - interviewed by Sophie Quinton on background, Pluribus News, for "Calif. legislators consider 'catastrophe modeling' to address insurance crisis" (print, June 16), <a href="https://pluribusnews.com/news-and-events/calif-legislators-consider-catastrophe-modeling-to-address-insurance-crisis/">https://pluribusnews.com/news-and-events/calif-legislators-consider-catastrophe-modeling-to-address-insurance-crisis/</a>
  - 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),

    <a href="https://www.fastcompany.com/90907815/floridas-property-insurance-is-in-crisis-and-its-not-just-about-the-hurricanes">https://www.fastcompany.com/90907815/floridas-property-insurance-is-in-crisis-and-its-not-just-about-the-hurricanes</a>
  - provided SHELDUS data for visualization "Accounting for flood risk would lower American house prices by \$187bn", The Economist (print, April 25), <a href="https://www.economist.com/graphic-detail/2023/04/25/accounting-for-flood-risk-would-lower-american-house-prices-by-187bn">https://www.economist.com/graphic-detail/2023/04/25/accounting-for-flood-risk-would-lower-american-house-prices-by-187bn</a>
  - interviewed and quoted by Jo Harper, Deutsche Welle, for "Turkey earthquake: How are the true costs calculated?" (print, February 23), <a href="https://www.dw.com/en/turkey-earthquake-how-are-the-true-costs-calculated/a-64779533">https://www.dw.com/en/turkey-earthquake-how-are-the-true-costs-calculated/a-64779533</a>; republished by <a href="mailto:Taiwan News">Taiwan News</a>
- 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), <a href="https://insideclimatenews.org/news/28092015/new-york-epic-floods-climate-change-hurricanes/">https://insideclimatenews.org/news/28092015/new-york-epic-floods-climate-change-hurricanes/</a>
  - interviewed and quoted by Lisa Song, Inside Climate News, for "Most extreme weather has climate change link, study says" (print, June 23), <a href="https://insideclimatenews.org/news/23062015/most-extreme-weather-has-climate-change-link-study-says-global-warming-trenberth-ncar-sea-levels/">https://insideclimatenews.org/news/23062015/most-extreme-weather-has-climate-change-link-study-says-global-warming-trenberth-ncar-sea-levels/</a>
- interviewed by Brandon Richards, KPLC-TV, for "LSU study to look at impact of flood insurance in SWLA" (TV, February 20), <a href="https://www.kplctv.com/story/14065675/lsu-students-look-at-impact-of-flood-insurance-in-swla/">https://www.kplctv.com/story/14065675/lsu-students-look-at-impact-of-flood-insurance-in-swla/</a>