Mary Angelica Painter, Ph.D., M.A.

mary.painter@colorado.edu ♦ Personal Website ♦ Research Associate Website
ORCID ♦ ResearchGate ♦ Google Scholar

Dr. Mary Angelica Painter is a political scientist with expertise in political and governance dimensions of vulnerability to natural hazards. She is a research associate for the Natural Hazards Center at the University of Colorado Boulder, A CONVERGE Data Ambassador, and a co-founder of the SOLVER (Social Vulnerability & Resilience) Research Laboratory. Dr. Painter's research interests include developing and adopting new ways to understand and engage with socially vulnerable communities in the context of natural hazards, while also incorporating the effects of the role of government, policy, and politics in disaster response. Her research is driven by a philosophy of collaboration, where community, decisionmakers, researchers, and everyday people are involved in identifying problems and finding solutions together for those who are in most need.

Education

May 2020	Doctor of Philosophy (Ph.D.) Political Science University of Missouri – St. Louis *Research Methods, Comparative Politics, Policy Process*
Dec. 2013	Master of Arts (M.A.) International Relations Webster University – Bangkok, Thailand Campus
Dec. 2010	Bachelor of Arts (B.A.) Political Science (Minor: French) University of Missouri – St. Louis

Academic Appointments

Nov. 2023 –	Research Associate *Natural Hazards Center, University of Colorado Boulder*
Jun. 2022 – Nov. 2023	Postdoctoral Research Associate *Natural Hazards Center, University of Colorado Boulder*
Jan. 2022 – May 2022	Assistant Instructor *Washington University at St. Louis*
Jan 2020 – May 2021	Adjunct Instructor *University of Missouri – St. Louis*
Aug. 2015 – Dec. 2019	Graduate Assistant (Teaching and Research) *University of Missouri – St. Louis*

Administrative Appointments

Apr. 2020 – Feb. 2022   Learning Analytics Coordinator
University of Missouri – St. Louis

May 2018 – Sep. 2018   Project Manager
Scholars Strategy Network

Leadership Appointments

Sep. 2021 –   Co-Founder
SOLVER (Social Vulnerability & Resilience) Research Laboratory

Aug. 2020 –   Co-Leader
RLadiesSTL

Sep. 2020 – May 2023   Co-Director of Confluence Chapter
Scholars Strategy Network

Peer-Reviewed (Refereed) Publications

Tormos-Aponte, F., Prudencio, W., **Painter, M.A.**, Franklin, B. 2022. "Clientelism and Corruption in the Wake of Disasters." *CENTRO Journal*, 34 (2).

Tormos-Aponte, F., García López, G.A., and **Painter, M.A**. 2021. "Energy Inequality in the Wake of Disasters: From Colorblind to Affirmative Power Restoration." *Energy Policy,* 158, 112550. https://doi.org/10.1016/j.enpol.2021.112550.

Painter, M. A., and Kimball, David C. 2021. "Local Politics as a Context for Polarizing Cues." *Journal of Elections, Public Opinion and Parties*, 1-20. https://doi.org/10.1080/17457289.2021.1945611.

In-Preparation: Peer-Reviewed (Refereed) Manuscripts

Painter, M. A., Shah, S. H., Alexandre, G. C., Khalid, F., Prudencio, W., Chisty, M. A., Tormos-Aponte, F., and Wilhelmi, O. 2023. "A Systematic Scoping Review of the Social Vulnerability Index as Applied to Natural Hazards." Completing revisions for Natural Hazards (ID: NHAZ-S-23-01155). Pre-print access available here.

Tormos-Aponte, F., **Painter, M. A.**, Franklin, B., and Shah, S. H. "Out of Power but Not Powerless: Electoral Consequences of Disaster Response to Hurricane María in Puerto Rico." For submission to *American Journal of Political Science* (90% complete; unsubmitted).

Painter, M. A., Villarreal, M., and Peek, L. "State Hazard Mitigation Plans and Social Vulnerability." For submission to *Journal of Environmental Management* (90% complete; unsubmitted).

Painter, M. A., Tormos-Aponte, F., Roque, A. D., Peek, L., Wilhelmi, O., and Shah, S. H. "From Social Vulnerability Indices to Social Vulnerability Processes." For submission to *Climate & Development* (70% complete; unsubmitted).

Roque, A.D., Quintana, E., Shah, S.H., **Painter, M.A.**, Cuevas, F., and Tormos-Aponte, F. "Assessment of a Co-Created Toolkit: Lessons from Community and Academic Cooperation." For submission to *Journal of Community Health* (50% complete; unsubmitted).

Painter, M. A., Villarreal, M., Champeau, H., and Peek, L. "Exploring the Process of Disaster Mitigation." For submission to *Weather, Climate, & Society* (30% complete; unsubmitted).

Published Datasets (Including in Preparation)

Painter, M. A., Shah, S. H., Prudencio, W., Damestoit, G. C., Khalid, F., Chisty, M. A., Tormos-Aponte, F., and Wilhelmi, O. 2023. "2003-2021 A Systematic Scoping Review of the Social Vulnerability Index as Applied to Natural Hazards." in *A Systematic Scoping Review of the Social Vulnerability Index as Applied to Natural Hazards*. DesignSafe-CI. https://doi.org/10.17603/ds2-jgdv-1w43 v1.

Painter, M.A., Villarreal, M., and Peek, L. 2023. "2016-2021 State Hazard Mitigation Plans and Social Vulnerability," in *State Hazard Mitigation Plans and Social Vulnerability*. DesignSafe-CI. https://doi.org/10.17603/ds2-sc34-as63 v1.

Roque, A.D., Quintana, E., Shah, S.H., **Painter, M.A.**, Cuevas, F., Tormos-Aponte, F. 2023. "Intra-Community Public Health Impacts from Compounding Food, Energy, and Water Insecurities." For submission to *DesignSafe-CI* (70% complete; unsubmitted).

Non-Refereed Publications

Peek, L., **Painter, M.A.,** Eosco, G., Agather, A.M., Mote, J., Shivers-Williams, C., Tobin, J., Breeden, J., and Open Data Workshop Participants. 2023. Final Report of the Workshop on Open Data and Reuse in Social Science Weather Research. Natural Hazards Center, University of Colorado Boulder. hazards.colorado.edu/research/weather-ready-research/open-data-workshop.

Roque, A.D., Quintana, E., Shah, S.H., **Painter, M.A.**, Cuevas, F., Tormos-Aponte, F. 2023. Assessing Intra-Community Public Health Impacts from Compounding Food, Energy, and Water Insecurities. *Natural Hazards Center Public Health Grant Report Series: 37*. University of Colorado Boulder.

Marchezini, V., Villarreal, M., Paula, A.L., Cunha, A.P., Mourao, C.S., Evans, C., MacPherson-Krutsky, C., Cunningham, C., Urbano, D., Mota e Silva, J.A., West, J., Champeau, H., Santos, L.B.L., Londe, L.R.,Gargione, L., Green, L., Zeri, M., Mascarenhas, M., **Painter, M.A.**, Andrade, M.E.M., Mordy, M., Adams,R.,Trajber, R., Pereira, R., Nery, T.D., Muñoz, V.A., and Peek, L. 2023. *Potential for future research collaboration between Natural Hazards Center and National Center for Monitoring and Alerts of Natural Disasters.* Working paper: Natural Hazards Center and National Early Warning and Monitoring Centre of Natural Disasters.

Marchezini, V., Champeau, H., Paula, A.L., Cunha, A.P., Mourao, C.S., Evans, C., MacPherson-Krutsky, C., Cunningham, C., Metodief, D., Urbano, D., Mota e Silva, J.A., West, J., Santos, L.B.L., Anderson, L., Londe, L.R., Gargione, L., Green, L., Zeri, M., Mascarenhas, M., **Painter, M.A.,** Mordy, M., Villarreal, M., Trajber, R., Pereira, R., Saito, S.M., Mendes, T.S.G., Nery, T.D., Muñoz, V.A., Peek, L. 2023. *Interdisciplinary Approaches for Advancing People-Centered Warning Systems*. Working Paper: Natural Hazards Center and National Early Warning and Monitoring Centre of Natural Disasters. Available at: https://hazards.colorado.edu/biography/victor-marchezini.

Tormos-Aponte, F., **Painter, M.A.**, and Shah, S.H. 2022. "Puerto Rico's Electricity Problems Go Beyond Mari and Fiona." Published by *the Washington Post*, https://www.washingtonpost.com/politics/2022/09/28/puerto-ricos-electricity-problems-go-beyond-mara-fiona/.

Tormos-Aponte, F., García-López, G., and **Painter, M.A**. 2021. "Hurricanes May Not Discriminate, But Governments and Utility Companies Do, Our Research Finds." Published by *the Washington Post*, https://www.washingtonpost.com/politics/2021/09/23/hurricanes-may-not-discriminate-governments-utility-companies-do-our-research-finds/.

Tormos-Aponte, F., García-López, G., and **Painter, M.A**. 2021. "How Inequity and Politics Influence Government Responses to Natural Disasters." Published by *Scholar Strategy Network*, https://scholars.org/contribution/how-inequality-and-politics-influence.

Mangan, A., **Painter, M.A.**, Shell, E. Bello-Pardo, E. Nayak, M., Ray, J. and White, M. 2020. "Voters Support the Biden-Sanders Task Force Recommendations." Published by *Data for Progress*, https://filesforprogress.org/memos/Biden-Sanders-Unity-Task-Force.pdf.

Painter, M.A. 2020. "Curb-Sided: How Technology Disrupts the American Transportation Planning Process." *Ph.D. diss. University of Missouri - Saint Louis*. Ann Arbor: ProQuest. Dissertations. 932.

Painter, M.A. 2019. "Why We Need to Address the Demands of Striking Ride-Hailing Service Drivers." Published by *the Washington Post*, https://www.washingtonpost.com/outlook/2019/05/08/why-we-need-address-demands-striking-ride-share-drivers/.

Kimball, D.C., and **Painter, M.A.** 2018. "How Exit Polls Can Help Newly Elected Leaders Gauge the Policy Preferences of Voters." Published by *Scholar Strategy Network*, https://scholars.org/contribution/how-exit-polls-can-help-newly-elected-leaders-gauge-policy-preferences-voters.

Community-Based Research Products

Peek, L., MacPherson-Krutsky, C., **Painter, M.A.**, Villarreal, M. 2023. "Colorado Inclusive Language and Access in Emergency Alerts." https://hazards.colorado.edu/research-projects/colorado-inclusive-language-and-access-in-emergency-alerts.

Roque, A., Quintana, E., Shah, S.H., **Painter, M.A.**, Tormos-Aponte, F., Quintana, F.C., Cólon, G.A., Prudencio, W., De León Colon, K.R., Barnes, R., Navarro, E., Torres, J.N. 2023. Food, Energy, and Water Security in the Wake of Disaster: A Community-Based Experience Assessment Tool Kit. *A Tool Kit for Assessing Community Wellbeing Co-Created by Community Leaders of Corcovada (Puerto Rico) and Academic Researchers*: 1-50.

Research Grants and Awards

Peek, L., Campbell, N.M, Breeden, J., and **Painter, M.A.** Research Counts: Strengthening Diversity to Reduce Disproportionate Disaster Harm. *Margaret A. Cargill Philanthropies*, **$800,000**. [**APPLIED AND FUNDED**]

Painter, M.A. Participatory Budgeting: A Community-Led Intervention for Resource Security Following a Disaster. *Institute of Behavioral Sciences Small Grant Award* from the *Institute of Behavioral Sciences at University of Colorado Boulder*, **$2,500**. [**APPLIED QAND FUNDED**]

Roque, A., Quintana, E., Torres, E., Tormos-Aponte, F., **Painter, M.A.**, and Cuevas-Quintana, F. 2023. Participatory Budgeting: A Community-Led Intervention for Resource Security Following a Disaster. *Public Health Disaster Research Award* supported by the *Natural Hazards Center* (NHC) at the *University of Colorado, Boulder* with the support of the *National Science Foundation* (NSF) and *The Centers for Disease Control and Prevention* (CDC), **$10,000**. [**APPLIED AND FUNDED**]

Painter, M.A., and Tormos-Aponte, F. 2023. Better Measures of Social Vulnerability in Puerto Rico and U.S. Territories. National Science Foundation Analytics for Equity, **$75,000**. [**APPLIED AND UNSUCCESSFUL**]

Peek, L., **Painter, M.A.**, and Villarreal, M. 2022. Understanding Social Vulnerability: The Role of State Hazard Mitigation Officers (SHMOs) in Reducing Risk for Marginalized Populations. *Institute of Behavioral Science Research Development Award, University of Colorado Boulder*, **$15,000.** [**APPLIED AND FUNDED**]

Roque, A., Quintana, E., Shah, S.H., Tormos-Aponte, F., **Painter, M.A.**, and Cuevas-Quintana, F. 2022. Quantifying Health Impacts from Compounding Food, Energy, Water Insecurities in Disaster Contexts. *Public Health Disaster Research Award* supported by the *Natural Hazards Center* (NHC) at the *University of Colorado, Boulder* with the support of the *National Science Foundation* (NSF) and *The Centers for Disease Control and Prevention* (CDC), **$25,000**. [**APPLIED AND FUNDED**]

Painter, M.A. 2019. St. Louis Social Science Dissertation for *Curb-Sided: How Technology Disrupts the American Transportation Planning Process*. University of Missouir – St. Louis, **$15,000**. [**APPLIED AND FUNDED**]

Conferences, Workshops, Webinars, and Public Events

Painter, M. A., Villarreal, M., Seth, D., and Peek, L. 2023. State Hazard Mitigation Plans and Social Vulnerability. 48th Annual Natural Hazards Research and Applications Workshop, Broomfield, CO, Poster session.

Marchezini, V., Champeau, H., Paula, A.L., Cunha, A.P., Mourao, C.S., Evans, C., MacPherson-Krutsky, C., Cunningham, C., Metodief, D., Urbano, D., Mota e Silva, J.A., West, J., Santos, L.B.L., Anderson, L., Londe, L.R., Gargione, L., Green, L., Zeri, M., Mascarenhas, M., **Painter, M.A.,** Mordy, M., Villarreal, M., Trajber, R., Pereira, R., Saito, S.M., Mendes, T.S.G., Nery, T.D., Muñoz, V.A., Peek, L. 2023. Interdisciplinary Approaches for Advancing People-Centered Warning Systems. Workshop, Virtual.

Peek, L., **Painter, M.A.,** Eosco, G., Agather, A.M., Mote, J., Shivers-Williams, C., Tobin, J., Breeden, J., and Open Data Workshop Participants. 2023. Final Report of the Workshop on Open Data and Reuse in Social Science Weather Research. Natural Hazards Center, University of Colorado Boulder. hazards.colorado.edu/research/weather-ready-research/open-data-workshop. Workshop.

Painter, M.A., Shah, S.H., Roque, A. 2023. Measuring Vulnerability, I: Critical Approaches to Social Vulnerability Indices. Co-organized Session at the American Association of Geographers, Denver, U.S., Paper Session.

Painter, M.A., Tormos-Aponte, F., Roque, A., Peek, L., Wilhelmi, O., Shah, S.H. 2023. A Dynamic, Intersectional Approach to Transforming Social Vulnerability Indices. Presented at the American Association of Geographers, Denver, U.S. Presentation.

Painter, M.A., Roque, A., Quintana, E., Shah, S.H., Tormos-Aponte, F., Cuevas, F. 2023. Quantifying Household and Intra-Community Public Health Impacts of Compounding Food, Energy, and Water Insecurity in Corcovada, Puerto Rico. Presented at the American Society for Public Administration. Virtual, Presentation.

Painter, M.A. 2023. "Social Vulnerability and How We Measure it." Workshop Training for the United States Army Corps of Engineers. Denver, U.S., Presentation. (Presented twice for two groups in February and March).

Roque, A.D., Quintana, E., Shah, S. H., Tormos-Aponte, F., **Painter, M.A**., Cuevas, F. 2023. Assessing Intra-Community Public Health Impacts from Compounding Food, Energy, and Water Insecurities. Presented at the Natural Hazards Center as part of the Public Health Disaster Research Award Program Continuation Award: Extending Public Health Disaster Research and Community Engagement in the U.S. Territories. Virtual, Presentation.

Tormos-Aponte, F., Prudencio, W., Damestoit, G., **Painter, M.A**., Shah, S.H., Wilhelmi, O., Franklin, B. 2023. Mechanisms shaping the politics of social vulnerability. Presented at the National Center for Atmospheric Research Cohort 2 PI Symposium, Boulder, U.S. Presentation.

Roque, A., Quintana, E., Shah, S. H., Tormos-Aponte, F., Cuevas, F., **Painter, M.A.** 2023. Quantifying Household and Intra-Community Public Health Impacts of Compounding Food, Energy, and Water Insecurity in Corcovada, Puerto Rico. Presented at the Natural Hazards Center as part of the Public Health Disaster Research Award Program Continuation Award: Extending Public Health Disaster Research and Community Engagement in the U.S. Territories. Virtual, Presentation.

Tormos-Aponte, F., **Painter, M.A.**, Franklin, B., and Shah, S.H. 2022. Out of power but not powerless: Electoral consequences of disaster response in the wake of Hurricane María in Puerto Rico. Presented at the American Political Science Association 2022 - Local Political Economy Pre-Conference, Montreal, Canada and at the Atlanta Network for the Study of Race, Ethnicity and Politics - Clark Atlanta and Emory Universities, Atlanta, U.S. Presentation.

Tormos-Aponte, F., **Painter, M.A.,** Shah, S.H. 2022. Beyond Climate Change Vulnerability in Puerto Rico. Webinar hosted by Boricuas Unidos En La Diaspora. Virtual, Presentation.

Painter, M.A. 2019. The Split of St. Louis: How St. Louis Splits Along Borders and Beyond. Civitas-STL on St. Louis City and County Divide, St. Louis, MO. Talk.

Painter, M.A., and Kimball, D.C. 2019. The Political Context of Polarizing Cues. Presented at the Midwest Political Science Association Conference. Chicago, IL. Presentation.

Painter, M.A. 2019. *State Policy Diffusion: Federalism and Transportation Regulation.* Presented at the Midwest Political Science Association Conference. Chicago, IL. Presentation.

Painter, M.A. 2018. *Chaos Constructed Silos and How Punctuation Leads to Policy Monopolies.* Presented at the Midwest Political Science Association Conference. Chicago, IL. Presentation.

Painter, M.A. 2018. *Language and Change: Effects of Discourse on Uber Regulation.* Presented at the Midwest Political Science Association Conference. Chicago, IL. Presentation.

Painter, M.A. 2017. *Importance of Public Transportation in Megacities: Dhaka and Climate Change.* Presented at International Studies Association Conference. St. Louis, MO. Presentation.

Painter, M.A. 2017. *Megacity Solutions: The Role of Mass Transit in Mitigating Pollution Emissions.* Presented at the Midwest Political Science Association Conference. Chicago, IL. Presentation.

Painter, M.A. 2016. *Luxury Consumption and Development: The Case of Beer Consumption and Gender Equality*. Presented at the Great Plains Political Science Association Conference. Kansas City, KS. Presentation.

Teaching Experience:

Course Guest Lecture -SEFS 590: Climate Change Vulnerability, Adaptation and Societal Transformations
> Winter 2023 (January - March 2023)
> School of Environmental and Forest Sciences, University of Washington
> ***Measuring Social Vulnerability: One Dominant Approach***

Course Guest Lecture -ESRM 490 / ENVIR 495 / SEFS 590: Climate Justice
> Spring 2023 (March - June 2023)
> School of Environmental and Forest Sciences, University of Washington
> ***Using Research in Practice: How to Be an Impactful Environmental Justice Researcher***

Assistant Instructor
> Spring 2022 (January – May 2022)
> Washington University in St. Louis
> ***PSYCH 5067 – Quantitative Methods II***

Adjunct Instructor
> Spring 2020 (January – May 2020)
> University of Missouri – St. Louis
> ***POL SCI 6401 – Introduction to Policy Research***

> Spring 2021 (January – May 2021)
> University of Missouri – St. Louis
> ***POL SCI 3000 – Political Analysis***

Graduate Teaching and Research Assistant
> August 2015 – May 2018
> University of Missouri – St. Louis
> ***Various Courses in Political Science***
> ***Independently taught POL SCI 2510 – Politics of the European Union (Spring 2017)***

Academic Publications and Award Proposal Reviews

As an academic reviewer, I have reviewed journal articles for several journals, including *Natural Hazards*, *Natural Hazards Review*, *Water Resources Research*, *Social Currents*, *Critical Disaster Studies*,

and *PLOS ONE*. I have also reviewed several Public Health Award and Quick Response Award proposals for funding from the Natural Hazards Center (NSF Award #1635593) with support from the Centers for Disease Control and the National Science Foundation (NSF Award #1635593). I also work on developing calls, including for the Weather Ready Research Award Program supported by the National Oceanic and Atmospheric (NSF Award #1635593). After funding, I also review reports for these awards for publication on the Natural Hazards Center website.