AMERICA R. GAVIRIA PABON

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EDUCATION

The University of Oklahoma *January 2023-present Norman, OK*
Ph.D. in Geography and Environmental Sustainability
The University of Oklahoma *January 2021-December 2023 Norman, OK*
M.S. in Geography and Environmental Sustainability
University of Puerto Rico at Mayaguez *2015-2020 Mayaguez, Puerto Rico*
B.S. in Physical Sciences

RESEARCH

Graduate Research Assistant Spring 2023-present
Cooperative Institute for Severe and High-Impact Weather Weather Research and Operations The University of Oklahoma

Work with scientific research projects in the areas of bilingual weather risk communication and severe weather events. Conduct interviews during field work with vulnerable communities affected by severe weather events. Develop surveys related to weather risk information for Spanish speaking communities.
Mentors: Dr. Makenzie J. Krocak

Graduate Research Assistant Spring 2021-present
Institute for Public Policy Research and Analysis *The University of Oklahoma*

Work with scientific research projects in the areas of bilingual weather risk communication, severe, winter and tropical weather, social science and Vulnerability. Perform literature review, reference reports and write scientific papers. Help develop surveys related to weather risk information in English and Spanish.
Mentor: Dr. Joseph T. Ripberger

Summer Intern Summer 2022
National Center for Atmospheric Research *Boulder, Colorado*

I was part of NCAR's first Graduate Visitor Bridge Program. I worked on a small research project related to my master's thesis topic. Analyze survey data in R. Literature Review. Connected and networked with professionals at NCAR.
Mentor: Dr. Julie Demuth

Summer Intern Summer 2020
National Weather Center *The University of Oklahoma*

Norman, Oklahoma
Research topic: **Understanding the correlation between NWS impact-based Flash Flood Warning categories and various NWS flash flood tools**
Classified a database of recent flash flood events based on their perceived impact categories by looking at reports, event summaries and information from social media. After this, I calculated statistics to determine the distribution of flash flood events based on their impacts. The goal of the project was to provide forecasters with information that can help increase their confidence during warning decisions.
Mentors: Jill Hardy, Dr. Jonathan J. Gourley, Todd Lindley

Undergraduate Research Spring 2020
Department of Social Sciences *University of Puerto Rico-Mayaguez*

Research topic: **Mitigation, Adaptation and Resilience on Climate Change.**
Perform a context analysis on a climate change law in Puerto Rico. Wrote about climate change and the effects on Puerto Rico and the Caribbean.
Mentor: Dr. Tania Lopez Marrero

Undergraduate Research January 2019- December 2019
Physics Department *Universtiy of Puerto Rico-Mayaguez*

Research topic: **Amazon Smoke Plum**
Collect and analyze data of carbon monoxide over the South American region to comprehend its concentration due to different causes like biomass burning, deforestation and the dry season cycle using tools such as MERRA2, MOPITT and AIRS.
Mentor: Dr. Mark Jury

Undergraduate Research Spring 2019
Physics Department *University of Puerto Rico-Mayaguez*

Research topic: **Upper Air Weather Balloon Launch**
Prepare a weather balloon for a weekly launch to describe and understand the behavior of the atmosphere through data and analysis of a Skew-T. Prepare a weather forecast using this information and additional data from satellite and radar images, and the NWS in San Juan.
Mentor: Dr. Hector Jimenez

SKILLS

Proficient in Spanish and English
R programming basic statistics
Survey Design and Development
Research and Interviewing
Computer proficiency
Leadership experience

WORKSHOPS

Mind the Gap: A Workshop to Promote Educating the Next Generation of Atmospheric Scientists for Industry Needs July 10th to July 12th, 2019
National Center for Atmospheric Research *Boulder, Colorado*

A three day workshop where students, academia and private sector in the atmospheric sciences came together to better prepare the students for the wide range careers in atmospheric sciences. Discuss the gaps within these three sectors and how to address them.

Undergraduate Leadership Workshop June 3rd to June 9th, 2018
National Center for Atmospheric Research *Boulder, Colorado*

One week of workshops in communication, listening, leadership skills and team work. Also had the opportunity to network with people in the scientific community.

PUBLICATIONS

Bitterman, A., J. Ripberger, M. Krocak, C. Silva, H. Jenkins-Smith, J. Trujillo-Falcón, **A. Gaviria Pabón**, and S. Ernst, 2024: Continuing the Baseline: Public Receptions, Understanding, and Responses to Severe Weather Forecasts and Warnings for U.S. Spanish Speakers. Harvard Dataverse, V1, https://doi.org/10.7910/DVN/JFLKOJ.

Bitterman, A., M. Krocak, J. Ripberger, J. Demuth, R. Prestley, C. Wirz, C. Silva, H. Jenkins-Smith, **A. Gaviria Pabón** S. Stormer, and C. Black, 2024: Establishing the Baseline: Public Reception,

Understanding, and Responses to Winter Weather Forecasts and Warnings in the Contiguous United States. Harvard Dataverse, V1, https://doi.org/10.7910/DVN/9ZGJEE.

Bitterman, A., M. Krocak, J. Ripberger, C. Silva, H. Jenkins-Smith, **A. Gaviria Pabón**, Z. Rosen, and V. Dunham, 2024: Establishing the Baseline: Public Reception, Understanding, and Responses to Tropical Cyclone Forecasts and Warnings for Spanish Speakers in the Contiguous United States. Harvard Dataverse, V1, https://doi.org/10.7910/DVN/DSLY5D.

Trujillo-Falcón, J. E., **Gaviria-Pabon, A.R.**, Reedy, J. and Klockow-McClain, K. E. (2023). Systemic Vulnerabilities in Hispanic and Latinx Immigrant Communities Led to the Reliance of an Informal Warning System in the December 10-11, 2021 Tornado Outbreak, EarthArXiv, https://doi.org/10.31223/X5FW8F

Bitterman, A., J. Ripberger, C. Silva, H. Jenkins-Smith, J. Trujillo-Falcón, **A. Gaviria Pabón**, and M. Krocak, 2023: Expanding the Baseline: Public Receptions, Understanding, and Responses to Severe Weather Forecasts and Warnings for U.S. Spanish Speakers. Harvard Dataverse, V2, https://doi.org/10.7910/DVN/Q5SCBB.

Bitterman, A., M. J. Krocak, J. T. Ripberger, S. Ernst, J. E. Trujillo-Falcón, **A. Gaviria Pabón**, and H. Jenkins-Smith, 2023: Assessing public interpretation of original and linguist-suggested SPC risk categories in Spanish. Wea. Forecasting, 38, 1095–1106, https://doi.org/10.1175/WAF-D-23-0045.1.

Bitterman, A., Ripberger, J.T., Silva, C.,Jenkins-Smith, H., Trujillo-Falcón, J.E.,**Gaviria-Pabon, A.R.**, Krocak, M.J., 2023: "Expanding the Baseline: Public Receptions, Understanding, and Responses to Severe Weather Forecasts and Warnings for U.S. Spanish Speakers", https://doi.org/10.7910/ DVN/ Q5SCBB, Harvard Dataverse, V1, UNF:6:F9dSa13iadKDjn6jpeaw1Q== [fileUNF]

Gaviria-Pabón, A. R., 2022: The role of disaster subcultures in Spanish-speaking Hispanic/Latino immigrants in the United States. Ph.D. dissertation, The University of Oklahoma, 187 pp. https://shareok.org/handle/11244/336948.

Trujillo-Falcón, J. E., **A. R. Gaviria Pabón**, J. T. Ripberger, A. Bitterman, J. B. Thornton, M. J. Krocak, S. R. Ernst, E. Cassiani Obeso, and J. Lipski, 2022: ¿Aviso o alerta? Developing effective, inclusive, and consistent watch and warning translations for U.S. Spanish speakers. Bull. Amer. Meteor. Soc., Early Online Release, https://doi.org/10.1175/BAMS-D-22-0050.1.

Jury, M. R., and **A. R. Gaviria Pabón**, 2021: Dispersion of smoke plumes over South America. Earth Interactions, 25, 1–14, https://doi.org/10.1175/EI-D-20-0004.1.