

**Lorna G. Jaramillo Nieves, Ph.D., G.T.**  
University of Puerto Rico, Río Piedras Campus  
PO Box 23323  
San Juan, Puerto Rico 00931-3323  
Work: (787) 764-0000 x86779 / Mobile: (787) 562-5186  
[lorna.jaramillo@upr.edu](mailto:lorna.jaramillo@upr.edu) / [jaramillolg@gmail.com](mailto:jaramillolg@gmail.com)  
[ORCID 0000-0002-8152-7167](https://orcid.org/0000-0002-8152-7167)  
[LinkedIn](#)

---

#### **PROFILE:**

Award-winning scientist, educator, researcher, and subject matter expert with 20+ years of experience teaching for a higher education research institution. Published author of two books related to seismic activity and landslides in Puerto Rico and multiple peer-reviewed publications. Holds doctorate (PhD) in Geology. Brings track record of advising government officials and providing recommendations on landslide hazard, preparation, and risk reduction. Has conducted extensive research on interdisciplinary and socially relevant topics. Has presented for both academic and general public audiences.

#### **BOOKS PUBLISHED:**

**Jaramillo Nieves, L.G., 2023,** [\*La actividad sísmica en Puerto Rico y la protección del patrimonio \(Seismic Activity in Puerto Rico and the Protection of Heritage\)\*](#), Funded by Humanities Puerto Rico and the *National Endowment of the Humanities*.

**Jaramillo Nieves, L.G., 2018,** *El terremoto en Puerto Rico: lecciones cien años después* (The Earthquake in Puerto Rico: lesson one hundred years later), Hato Rey, Puerto Rico, Publicaciones Puertorriqueñas. [ISBN978-1-62537-282-6](#)

#### **EDUCATION:**

January 1999-  
December 2003

##### **[University of Colorado, Boulder](#)**

Doctor of Philosophy Degree in Geology

*Remote sensing evaluation of the regional chemistry and element dispersion of porphyry copper deposits in the Silver Bell Mountains, Arizona.*

Advisor: William Atkinson, Ph.D.

Awarded:

2003, **Bill Hiss Creativity Travel Award**

2000 and 2002, **Longley, Warner & Whalstrom Scholarship**

1999–2003, **American Geological Institute Minority Scholar**

1999–2002, **Alfred P. Sloan Fellowship**

Course offered as Teaching Assistant:

**Introduction to Petrology Laboratory (GEOL 3020)**, Geological Sciences Department, College of Art and Sciences, University of Colorado at Boulder

August 1996-  
December 1998 [University of Puerto Rico, Mayagüez](#)  
11 credit hours, Master's in Science (Transferred to Doctoral Degree)  
Advisor: Glen S. Mattioli, Ph.D.

Course offered as Teaching Assistant:  
**Geology for Engineers Laboratory (GEOL 4015)**, Geology Department, College of Art and Sciences, University of Puerto Rico, Mayagüez

August 1991-  
December 1995 [University of Puerto Rico, Mayagüez](#)  
Bachelor of Science Degree in Geology  
Magna Cum Laude  
Harry Hess Medal: Highest GPA in Class

**PROFESSIONAL EXPERIENCE:**

July 2016 -  
present [University of Puerto Rico at Río Piedras](#)  
[College of General Studies](#)  
[Physical Science Department](#)  
Professor

July 2010 –  
June 2016 **University of Puerto Rico at Río Piedras**  
College of General Studies  
Physical Science Department  
Associate Professor

August 2004 –  
June 2010 **University of Puerto Rico at Río Piedras**  
College of General Studies  
Physical Science Department  
Assistant Professor

Courses offered in the Physical Science Department, College of General Studies, University of Puerto Rico, Río Piedras:

- **Foundation of Great Changes in the Physical Sciences I** (CIFI 3003)
- **Foundations of Physical Sciences for Students in the Special Education and Grade School Education Program of the College of Education** (CIFI 3005)
- **Origin and Evolution of the Earth** (CIFI 3026), Team Teaching (Part of the course creator group)
- **Energy, Environment, and Conservation** (CIFI 3036)
- **Foundations and development of the physical sciences I and II** (CIFI 3055, CIFI 3065)
- **Interdisciplinary Topics in Physical Sciences: Development of Chemistry** (CIFI 4995)
- **Interdisciplinary Topics in Physical Sciences: Human aspects of geologic events** (CIFI 4995), **Course creator**. Currently revised as **Geologic Processes, Disasters, and their Effects on Society** (CIFI 4065)
- **Undergraduate Research in Physical Sciences** (CIFI 4996)

Courses offered in other departments, colleges, or schools by invitation:

- **Physical Geology (CINA 4147)**, Environmental Sciences Department, College of Natural Sciences, University of Puerto Rico, Río Piedras
- **Land use and management planning (CINA 4167)**, Environmental Sciences Department, College of Natural Sciences, University of Puerto Rico, Río Piedras
- **Epistemological foundations of Physical Sciences (ESGE 4186)** General Studies Program, College of General Studies, University of Puerto Rico, Río Piedras
- **Hydrogeology of Puerto Rico (GEOG 4041)**, Geography Department, College of Social Sciences, University of Puerto Rico, Río Piedras
- **Risk and Natural Hazards (PLAN 6003)**, Graduate Planning School, University of Puerto Rico, Río Piedras

1999- 2003

**US Geological Survey  
Southwest Field Office, Tucson, AZ**

Geologist GS-09 (Performed role while pursuing graduate studies)  
Supervisor: Floyd Gray

Described surficial deposits affected by erosion from active mine areas, enabling subsequent pollution and water quality studies. Identified alteration zones in the Silver Bell Mountains, Arizona using remote sensing techniques in the visible and infrared regions. Presented findings and techniques to Geological Society of America (GSA).

Refined and added identification criteria into database regarding alteration spectra in watersheds associated with mineralized and mined regions for environmental assessment (source, transport criteria, and mineral identification).

Assisted supervisor in preparing fiscal year project fieldwork by reviewing maps, aerial photos, and satellite images. Researched and compiled existing map information.

Contributed to drafting and editing the hydrologic framework of the US-Mexico Border.

2001

**Waterstone Environmental Hydrology & Engineering  
Inc., Boulder, Colorado**

Contract

Translated hydrology reports and scientific documents from Spanish to English.

1995

**Waterways Experiment Station,  
US Army Corps of Engineers, Vicksburg, Mississippi**

Summer Intern

Laboratory assistant

Develop granulometric analysis of selected areas along US East Coast.

1992-1993

**Seismic Network of Puerto Rico,  
University of Puerto Rico, Mayagüez**

Data Analyst

Collection of seismic activity data from Puerto Rico and the Caribbean Plate.

**PROFESSIONAL LICENSE:**

**Geologist in Training**

**National Association of the State Boards of Geology,  
ASBOG**

License Number 077-E

**UNIV. OF PUERTO RICO, RIO PIEDRAS CERTIFICATIONS:**

Spring semester  
2019

**Online module: Certification on the Construction of  
virtual learning environments**

Center of Academic Excellence

Office of Academic Affairs

Fall semester  
2017  
Fall Semester  
2024

**Online module: Training on personnel matters for  
department directors and personnel committee**

(Cert. No. 032, Year 2002-2003, University Board)

**RESEARCH TRAINING AND CERTIFICATIONS:**

January 2025-  
January 2030

**Social & Behavioral Research - Basic/Refresher -**

**Social & Behavioral Human Research**

CITI Program, (ID 58345)

January 2025  
January 2029

**CITI Conflicts of Interest - Conflicts of Interest**

CITI Program, (ID 108342)

December 2020  
December 2025

**Social and Behavioral Responsible**

**Conduct of Research**

CITI Program, (ID 58378)

December 2020

**Conducting Emotionally Challenging Research**

Natural Hazards Engineering Research Infrastructure (NHERI),  
Natural Hazards Center, University of Colorado, Boulder.

December 2020

**Disaster Mental Health**

*Natural Hazards Engineering Research Infrastructure (NHERI),  
Natural Hazards Center, Universidad de Colorado, Boulder.*

December 2020

**IRB Procedures and Extreme Event Research**

*Natural Hazards Engineering Research Infrastructure (NHERI),  
Natural Hazards Center, Universidad de Colorado, Boulder.*

## **GENERAL, TECHNICAL AND SPECIALIZED SKILLS:**

- Experience in grant submission to the National Aeronautics and Space Agency (NASA), the National Oceanic and Atmospheric Administration (NOAA), the National Science Foundation (NSF), the National Endowment for the Humanities (NEH), the Spencer Foundation, and Humanities Puerto Rico.
- Experience in compliance with federal regulations for research with human subjects, use of vertebrate for research and substance/material management for research.
- Knowledge in writing and management of research agreements such as Memorandum of Understanding (MOU) and Material Transfer Agreement (MTA), in addition to protocols for the participation of human subjects in research.
- Knowledge in geoscience programs and software, including MODFLOW, ENVI, ArcView, Arc Info, and QGIS.
- Experience with academic platforms such as Blackboard, Edu 2.0, and Moodle.
- Experience managing digital platforms and peer journal indexing such as Latindex, REDIB, and Open Journal Systems (OJS).
- Public speaking

## **LANGUAGES:**

- Spanish (Native Speaker)
- English (Second language, fluent orally and written)
- French (Novice)

## **HIGHER EDUCATION ADMINISTRATIVE EXPERIENCE:**

Spring, 2019-  
Spring 2023

### **Assistant Dean of Research**

Office of the Dean for Graduate Studies and Research  
University of Puerto Rico, Río Piedras

The position required the management of \$500,000 institutional funds for research, implementation of the Government of Puerto Rico [Law 60](#) on Campus, the compliance with annual reports to the federal government, considered in the Carnegie classification of the campus as R2: Doctoral University- High research activity, among other duties.

Spring, 2018-  
Spring, 2019

### **Interim Chair**

Department of Physical Sciences  
College of General Studies  
University of Puerto Rico, Río Piedras

Served as the chief executive and administrative officer of the department, as described in Article 25, Section 25.3.3 of the [University of Puerto Rico General by Laws, 2022](#)

Spring 2015 -  
Summer 2019

### **Editor in Chief, [Umbral Journal](#)**

College of General Studies  
University of Puerto Rico, Río Piedras  
Interdisciplinary peer-review journal  
ISSN 2151-8386

Fall, 2011-  
Summer, 2013

**Associate Dean of Academic Affairs**  
College of General Studies  
University of Puerto Rico, Río Piedras

The position required the supervision of tasks related to the campus accreditation with the Middle State Commission of Higher Education for 2012, college educational assessment and yearly academic program, among other duties.

2009-  
Summer 2011

**Engineering Program Coordinator**  
College of General Studies  
University of Puerto Rico, Río Piedras

The position required the orientation on the requirements of the curriculum in Electrical, Mechanical and Computer Engineering, outreach, and the hiring of professors, among other tasks.

2008-  
2009

**Umbral Project Director**  
College of General Studies  
University of Puerto Rico, Río Piedras

The Umbral project is a digital platform dedicated to the transdisciplinarity and proposes an activity of constant exchange and creation of knowledge. The platform has the purpose to promote the creation of a knowledge network and intellectual collaboration.

**CONFERENCE COORDINATIONS:**

November 20-22,  
2008

**Earth Sciences and Human Activity  
Conference**  
**International Year of Planet Earth Conference**  
University of Puerto Rico, Río Piedras  
Conference Coordinator  
[www.yearofplanetearth.org](http://www.yearofplanetearth.org)

April 18-25, 2007

**Gaia and Climate Change, International Congress**  
University of Puerto Rico, Río Piedras  
Program Coordinator

**NATIONAL AND INTERNATIONAL COLLABORATIONS:**

2023

Panel Reviewer  
National Science Foundation, NSF

2022

Evaluator, Fifth Grant Competition, Sloan Scholar Mentoring Network  
<https://sloan-scholars.ssrc.org/page/grants>

2020- present

Editorial Board Member, Umbral Journal  
<https://revistas.upr.edu/index.php/umbral>

- 2020 Evaluator, Third Grant Competition, Sloan Scholar Mentoring Network  
<https://sloan-scholars.ssrc.org/page/grants>
- 2014 – 2020 Evaluator for the National Fund for Innovation and Scientific and Technological Development (FONDOCyT, for its acronym in Spanish), International System of Higher Education, Science, and Technology, Dominican Republic.
- 2009-2011 Editor for a Special Issue in the Environmental Geochemistry and Health,  
3rd Hemispherical Conference on Medical Geology  
*Citation: Jaramillo-Nieves, L.G. and Finkelman, R., Eds., 2012, Special Issue: Current Research in Medical Geology and Environmental Geochemistry, vol. 34, no. 2, Environmental Geochemistry and Health, ISSN: 0269-4042 (Print) 1573-2983 (Online)*
- 2005 Collaborator with the [Iberoamerican Program for Science, Technology and Development \(Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo, CYTED\)](#)

**PROFESSIONAL AFFILIATIONS:**

- American Geophysical Union (AGU)
- Geological Society of America (GSA)
- Seismological Society of America (SSA)

**ADVISORY CONSULTING EXPERIENCE:**

- 2025- present [\*\*Advisory Committee on Landslides \(ACL\)\*\*](#)  
Appointed as member for three years by Deb Haaland, Secretary of the Interior. ACL submits recommendations for the implementation of the National Landslide Hazards Reduction Program through the Interagency Coordinating Committee on Landslide Hazards.
- 2020- 2024 **USGS and the Puerto Rico Seismic Network Liaison**  
Served as an expert advisor in the response and recovery phase resource meetings with the Government of Puerto Rico after the seismic sequence of December 2019 and January 2020.
- 2019- 2022 **Advisor**  
Leveraged subject matter expertise to advise UPR-Río Piedras Chancellor on developing University’s response plan and preparation to earthquake, leading to its execution, impacting ~14,000-person community.  
Advised Dean of Graduate Studies and Research on emergency action plan for earthquake and pandemic.

2020

**Facilitator**

Delivered educational sessions for Banco Santander employees, EcoExploratorio, Alzheimer's Association of Puerto Rico. Wrote article for Medical Technologists Association.

**COMMUNITY SERVICE**

2020- 2024

**Volunteer**

US Geological Survey Volunteer, USGS  
Including serving as the USGS and the Puerto Rico Seismic Network Liaison

**STUDENT MENTORING:**

Fall 2024

**Settlement patterns after a disaster. Looking at the record from transdisciplinarity.**

**1918 Earthquake, Añasco, Puerto Rico**

Alex Palermo Gómez

Departamento d Sociology and Anthropology

College of Social Sciences

University of Puerto Rico, Río Piedras

Undergraduate Research in Physical Sciences (CIFI 4996)

Fall 2019 -  
Spring 2023

**Characterization and Formation of Beach Rock in Puerto Rico.**

Kevián A. Pérez Valentín

Doctoral Thesis

Department of Environmental Sciences

College of Natural Sciences

University of Puerto Rico, Río Piedras

Committee Member

Fall 2016 -  
Spring 2022

**The Impact of Human Migration on Land Use and Water Quality**

Marianne Cartagena Colón

Doctoral Thesis

Department of Environmental Sciences

College of Natural Sciences

University of Puerto Rico, Río Piedras

Committee Member

Spring 2014-15

**Research Project: Relevance of the 1918 Earthquake in Puerto Rico for the present**

Joel Soto Melecio

Undergraduate Research Experience

Program of General Studies

College of General Studies

University of Puerto Rico, Río Piedras

Committee Chair



Spring 2014-15

**Research Project: Relevance of the 1918 Earthquake in Puerto Rico for the present**

Elenis García Marcano  
Undergraduate Research Experience  
Program of General Studies  
College of General Studies  
University of Puerto Rico, Río Piedras  
Committee Chair

Spring 2010-11

**Yabucoa Valley Agricultural Reserve: Perceptions, services, use and local knowledge of hydrological resources**

Angeliz Encarnación Burgos  
Master's Thesis  
Planning Graduate School  
University of Puerto Rico, Río Piedras  
Committee Member

Fall 2008-09  
Spring 2010-11

**Yabucoa Valley Agricultural Reserve: Implication analysis and recommendation for use and planning**

Ernesto Olivares and Angeliz Encarnación Burgos  
Research assistants  
Planning Graduate School  
University of Puerto Rico, Río Piedras  
Committee Member

**K-12 TEACHING EXPERIENCE:**

**Alliance for Minority Participation Summer Program**

Summer, 2007  
Summer, 2006  
Summer, 2005

Luis Muñoz Rivera High School, Utuado, Puerto Rico  
Luis Muñoz Marín High School, Yabucoa, Puerto Rico  
Josefina León Zayas High School, Jayuya, Puerto Rico

**Institute 2000**

Spring and  
Summer 2006

Geology and Environmental Problems Workshop  
University of Puerto Rico, Río Piedras

**CURRENT RESEARCH:**

January 2025  
Present

**Building Geological Hazards Capacity in Puerto Rico**

Grant: Collaborative Agreement, US Geological Survey, Department of the Interior

Funds: \$400,000

Synopsis: The project aims to study the use of decision-support and data products (DSDP) during the preparedness, warning, response, and recovery/mitigation periods of geologic hazard emergencies associated with tropical storms through the study of 4 prior events

in Puerto Rico: Hurricane Irma, (2017), Hurricane María (2017), Hurricane Fiona (2022), and Storm Ernesto (2024).

Role: Principal Investigator

Collaborators: Maritza Barreto Orta, Ph.D. and Ariam Torres Cordero, Ph.D.

Research Assistant: TBD

Products: 1. Development of a decision support and data product inventory. 2. A 2-day research workshop for local professionals involved in geologic hazards risk reduction activities. 3. The publication of a workshop proceedings document to serve as a resource for local-regional decision-makers, emergency managers and resource managers in Puerto Rico, a reference for agency alignment and communication goals, and a source potential future collaborative projects between USGS and partners in Puerto Rico. 4. Manuscript publication in scientific journals and conference presentations at local, regional, and national conferences.

July 2023  
Present

### **Flooding maps of the 1918 Tsunami in Puerto Rico based on historical archives**

Support: Department of Physical Sciences, College of General Studies, University of Puerto Rico, Río Piedras

Funds: In-kind

Synopsis: Construction of flooding maps using primary reference from digitized historical archives in Puerto Rico.

Role: Principal Investigator

Collaborator: Seismologist Roland La Forge, Golden Colorado

Research Assistant: Alex J. Palermo Gómez, Undergraduate, Sociology and Anthropology Department, College of Social Sciences, University of Puerto Rico, Río Piedras

Products: Flooding maps due to 1918 Tsunami for coastal municipalities in Puerto Rico (Añasco, Mayagüez y Aguada)

### **COMPLETED RESEARCH:**

July 2021-  
June 2023

### **Seismic activity in Puerto Rico and the protection of cultural heritage**

Grant: Puerto Rican Endowment for the Humanities (FPH, Spanish Acronym), National Endowment of the Humanities (NEH)  
Project number: FPH-33-2021

Funds: \$46,102

Synopsis: Dissemination of the history of seismic events in Puerto Rico, the memory of disaster and the effects of seismic activity on the cultural heritage in Puerto Rico through radio programs.

Role: Project Director

Collaborators: Dra. Ramonita Vega Lugo, History Program, Department of Social Sciences, College of Arts and Sciences, University of Puerto Rico, Mayagüez; Eng. José Izquierdo Encarnación, PORTICUS, Puerto Rico; Dra. Libia González López, Department of Humanities, College of General Studies, University of Puerto Rico, Río Piedras; Dra. Jenniffer Santos Hernández, Center for Social Research, College of Social Sciences, University of Puerto Rico, Río Piedras; Dra. Nadja Ríos Villarini, English Department, College of General Studies, University of Puerto Rico, Río Piedras; Dra. Mayra Jiménez, School of Architecture, University of Puerto Rico, Río Piedras; Dr. José J. Colón Morera, Department of Social Sciences, College of Social Sciences, Universidad de Puerto Rico, Río Piedras; Arq. Eliot Santos Negrón, School of Architecture, University of Puerto Rico, Río Piedras.

Products: Digital materials of all radio programs and their allocation in digital repositories, Digital Book, Web page: [Seismic activity in Puerto Rico and the protection of cultural heritage](#)

July –  
December 2019

**One community at a time: Local History, Regional Geology, and Social Science as a Foundation for Resilience in Communities in Puerto Rico after Hurricane María**

Grant: American Geophysical Union (AGU)

Funds: \$9,836

Synopsis: Research and service project for the resilience of communities in Puerto Rico after hurricane María.

Role: Co-Principal Investigator

Collaborators: Lindsay Ann Davis, USGS, Dr. Fernando Briones, Univ. of Colorado, Boulder, Dr. Erin Leckey, Univ. of Colorado, Boulder, and Dr. Ryan Vachon, Univ. of Colorado, Boulder

Product: Documental and conference and presentation at the AGU Fall Meeting 2019

2014 - 2018

**Research on the relevance of the Puerto Rico 1918 Earthquake for today's society**

Support: Department of Physical Sciences, College of General Studies, University of Puerto Rico, Río Piedras

Funds: In-kind

Synopsis: Research on the importance of the earthquake of 1918 in Puerto Rico through the study of historic documents.

Role: Principal Investigator

Product: Book publication, August 2018 and presentation at the GSA Annual Meeting 2018

Summer 2011

**Study of mass wasting (Landslides) related to the geology and hydrology of areas in Barranquilla, Colombia**

Summer Fellowship for Overseas Research

Grant: *Iniciativas de Investigación y Actividad Creativa Subgraduada, iNAS*, (Research Initiatives and Undergraduate Creative Activities) and the Department of Education for the development of research at the undergraduate level.

Funds: \$4,563.95

Synopsis: Analysis on the mass wasting status in Barranquilla, Colombia

Role: Principal Investigator

Collaborators: Dr. Rafel Guardado Lacaba, Instituto Metalúrgico y Minero, Moa, Cuba and Esq. Priscila Celedón Consuegra, Barranquilla, Colombia

Product: Report on the landslide in Barranquilla Colombia

2008-2010

**Groundwater and flow modeling of the Yabucoa Aquifer, Puerto Rico: a case study for the tropics**

Grant: Institutional Funds for Research

Funds: \$24,964.00

Synopsis: Construction of a groundwater model for the Yabucoa Valley using mathematical models (MODFLOW) and regional geology

Role: Principal Investigator

Product: Groundwater model of the Yabucoa Valley as a first version after the previous USGS resistivity groundwater model.

#### **PEER REVIEW PUBLICATIONS:**

**Contreras, S.L., Lorenzo-Pérez, M.A., Jaramillo Nieves, L.G.,** In Press, “Decolonizing Resilience: Learning from Unexplored Stories and Perspectives Surrounding Hazard and Disaster Risks in Puerto Rico” in *Decolonizing Planning: Power and Knowledge in the Informal City*, Edward Elgar Publishing Ltd.

**Jaramillo Nieves, L.G., 2012,** *Estudios de casos para la discusión de movimientos de masas e inestabilidad de taludes en el Caribe* (Case Studies for the Discussion of Mass Wasting and Slope Stability in the Caribbean), in *Deslizamientos: Efectos, evaluación y Gestión de Riesgo. Lecciones aprendidas de América Latina y el Caribe*, UNESCO, Eds. Ellis, J., Guardado Lacaba, R. Y Sánchez Boschini, I., pp. 43-54.

**Jaramillo, L.G. y Ge, S., 2012,** Groundwater Modeling of the Silver Bell Mountains, Arizona, USA, *Environmental Earth Sciences*, Vol. 66, no. 7, pp. 1933-1941. 10.1007/s12665-011-1418-9

**Jaramillo Nieves, L.G., 2010,** [\*Consideraciones sobre la vulnerabilidad en zonas urbanas de Puerto Rico ante la ocurrencia de eventos geológicos\*](#) (Vulnerability Considerations of Urban Zones in Puerto Rico due to Geologic Events), *REVISTA UMBRAL*, N.3 pp. 47-61 ISSN 2151-8386 Universidad de Puerto Rico Recinto de Río Piedras

**Mattioli, G., Jansma, P., Jaramillo, L., Smith Alan, 1996,** A desktop image processing and photogrammetric method for rapid volcanic hazard mapping: application to air-photo interpretation of Mount Pelée, Martinique, *Bulleting of Volcanology*, vol. 58, no.5, pp.401-410.

**Jaramillo, L., Mattioli, G., Jansma, P.E., Smith, A., 1995,** Sector collapse in island arc volcanoes and implications for hazard assessment: a digital topographic and bathymetric investigation of Qualibou Depression, St. Lucia, Lesser Antilles, *EOS Trans. Am. Geophys. Union*, vol. 76, no. 17, pp. 309.

**Mattioli, G., Jansma, P.E., Jaramillo, L., and Smith, A., 1995,** Sector Collapse in island arc volcanoes: a digital topographic and bathymetric investigation of the Qualibou depression, St. Lucia, Lesser Antilles, *Caribbean Journal of Science*, vol. 31 no.3, pp.163-173.

#### **CONFERENCE PROCEEDINGS:**

**Jaramillo Nieves, L.G., 2017,** “Investigación sobre la relevancia del terremoto del 1918 en Puerto Rico para la actualidad” (Research on the relevance of the 1918 earthquake in Puerto Rico), VII International Symposium on General Studies, November 4-6, 2017, San Juan, Puerto Rico, in *Documentos*, No. 23, ISSN 0378 956X, pp.645-662. <http://www.rideg.org/wp-content/uploads/2015/08/memoriasvii.pdf>

**Jaramillo Nieves, L.G., 2013,** “Agua, el recurso universal sin un lenguaje universal. La complejidad del manejo del agua causada por las percepciones humanas” (Water, the universal resource without a universal language. The complexity of water management due to human perceptions), V International Symposium on General Studies, November 6-9, 2013, San Juan, Puerto Rico <http://www.rideg.org/wp-content/uploads/2014/04/Agua-un-recurso-universal->

[sin-un-lenguaje-universal-La-complejidad-del-manejo-del-agua-causada-por-las-percepciones-humanas.pdf](#)

**Jaramillo Nieves, L.G., 2013**, “Curso Temas Interdisciplinarios de la Ciencias Físicas: Aspectos humanos de los eventos geológicos, CIFI 4995” (Course: Interdisciplinary Topics in Physical Sciences: Human Aspects of Geologic Events, CIFI 4995), V International Symposium on General Studies, November 6-9, 2013, San Juan, Puerto Rico <http://www.rideg.org/wp-content/uploads/2014/04/Curso-Temas-Interdisciplinarios-de-la-Ciencias-F%C3%ADsicas-Aspectos-humanos-de-los-eventos-geol%C3%B3gicos.pdf>

#### **SELECETED ORAL PRESENTATIONS AND PROFESSIONAL WORKSHOPS:**

**Jaramillo Nieves, L.G.**, Invited presentation. Panel Decolonizing Disasters: Centering Local Power for Resilience, July 9-12, 2023, Natural Hazards Center Workshop, Broomfield, Colorado.

**Jaramillo Nieves, L.G.**, Invited: Lessons Learned as a Geoscience Communicator During the 2020-2021 Southwest Puerto Rico Seismic Sequence. Seismological Society of America Annual Meeting, April 18, 2023, <https://seismosoc.secure-platform.com/a/solicitations/28/sessiongallery/763/application/9971>

Santos-Hernández, J.M., Campbell, N.M., McBride, S.K., **Jaramillo-Nieves, L.G.**, Vidal-Franceschi, F.J., Figueroa-Huertas, A.M. Méndez-Heavilin, A.J., Márquez=López, G.N., Rivera-Rivera, C.G. Torres-Febre, R.J., Vélez Rosario, J., Behavioral Responses to the 2020-2021 Southwest Puerto Rico Earthquake Sequence: Information-Seeking, Rumors, and Protective Action Decision-Making, America Annual Meeting, April 18, 2023, <https://seismosoc.secure-platform.com/a/solicitations/28/sessiongallery/763/application/9556>

**Jaramillo Nieves, L.G.**, The 2019-2020 Southwestern Puerto Rico Earthquake Sequence and the Intersection Between Geoscience Research, Education, and Communication, Virtual Panel on Seismic Hazard Communication and Education during the 2020 Puerto Rican earthquake sequence, U.S. Geological Survey Earthquake Science Center, April 28, 2021. <https://earthquake.usgs.gov/contactus/menlo/seminars/1327>

**Jaramillo Nieves, L.G.**, Assisting the Puerto Rico Seismic Network as a Science Communicator During the 7 January 2020 S of Indios Earthquake in Puerto Rico, Seismological Society of America, Virtual Meeting, April 19-23, 2021. <https://seismosoc.secure-platform.com/a/solicitations/24/sessiongallery/373/application/6614>

**Jaramillo Nieves, L.G.**, Similarities between the 1918 earthquake and the 2019-2020 Seismic Sequence South Puerto Rico: Lessons for the Construction of Seismic Awareness in Puerto Rico, Historical Research Center, Department of History, College of Humanities, University of Puerto Rico, Rio Piedras, June 25, 2021. <https://www.facebook.com/CIHUPR/posts/1382064765510701>  
<https://www.youtube.com/watch?v=1lTcoji3OkU>

**Jaramillo Nieves, L.G.**, How I managed to talk about disasters to the general public, Share your Science Backstory, Geological Society of America Annual Meeting, Virtual Meeting, September 1-17, 2020.

**Jaramillo Nieves, L.G.**, The importance of local history and memory of seismic events in Puerto Rico, Disaster and Society Conference Series: contributions from the social sciences,

Center for Social Research, College of Social Sciences, University of Puerto Rico, Río Piedras, October 6, 2020.

**Jaramillo Nieves, L.G., Lugo Bendezú, R. and West, J.,** *Partnerships for Natural Hazards Preparedness in Puerto Rico, 45th Natural Hazards Research and Application Workshop*, July 12-15, 2020, Virtual Conference, Natural Hazards Center, University of Colorado Boulder,

<https://hazards.colorado.edu/workshop/2020/session/partnerships-for-natural-hazards-preparedness-in-puerto-rico?row=28>

**Jaramillo Nieves, L.G.,** “El terremoto en Puerto Rico, lecciones cien años después, el uso de la historia puertorriqueña para acciones de prevención en comunidades de Puerto Rico” (The 1918 earthquake in Puerto Rico, lessons one hundred years later. Using Puerto Rican history for preventive action in communities of Puerto Rico), II Symposium of Disaster Risk Management and Coping with Climate Change, in XII International Convention on Environment and Development, Havana, Cuba, July 3, 2019. <http://www.cubambiente.com/es/default/principal>

**Jaramillo Nieves, L.G.,** “Communicating Seismic Hazards to the General Public with the Arts and Local History in Puerto Rico”, Geological Society of America Annual Meeting, Indianapolis, Indiana, September 6, 2018.

<https://gsa.confex.com/gsa/2018AM/webprogram/Paper320020.html>

**Jaramillo Nieves, L.G.,** “Conversatorio sobre experiencias durante un terremoto en nuestra región de Latinoamérica y el Caribe basada en las vivencias de los panelistas”, Seminar, College of General Studies, University of Puerto Rico, Río Piedras Campus, August 31, 2016, <https://umbral.uprrp.edu/seminarios/seminario-de-investigacion-interdisciplinaria/aspectos-humanos-de-los-eventos-geologicos/>

**Jaramillo Nieves, L.G.,** “Acuíferos y recursos subterráneos,” Workshop for Inspectors in the Ground Water Injection Program, Environmental Protection Agency (EPA), San Juan, Puerto Rico, August 19, 2015.

**Jaramillo Nieves, L.G.,** “El terremoto de Japón y lecciones para Puerto Rico”, Seminar, College of General Studies, University of Puerto Rico, Río Piedras Campus, March 25, 2011. <https://umbral.uprrp.edu/seminarios/seminario-de-educacion-general/terremoto-del-japon-y-lecciones-para-puerto-rico/>

**Jaramillo Nieves, L.G.,** “Cartografía de los riesgos por movimientos de laderas y taludes” (Landslide Risk Cartography), Geodynamic and Climatic Risk in the Dominican Republic and the Caribbean Workshop, University of Santo Domingo, sponsored by the Science Academy, Dominican Republic, September 6-9, 2010.

**Jaramillo Nieves, L.G.,** Conceptual model design for the Yabucoa aquifer groundwater modeling, 25th Annual Symposium of Caribbean Geology, Geology Department, University of Puerto Rico, Mayaguez, February 24-27, 2010.

**Jaramillo Nieves, L.G.,** Conceptual model design for the Yabucoa aquifer groundwater model, 3rd Hemispherical Conference on Medical Geology, Sponsored by the International Medical Geology Association, Uruguay, October 13-17, 2009.

**Jaramillo Nieves, L.G.**, “La educación general y el desarrollo del pensamiento: De la deriva continental a la teoría de tectónica de placas”, *9no Encuentro Internacional de Educación y Pensamiento*, Ponce, Puerto Rico, April 16-18, 2008

**Jaramillo Nieves, L.G.**, “Casos seleccionados en Puerto Rico para la discusión de movimientos de masas e inestabilidad de talud” (Selected cases from Puerto Rico for the discussion of mass movement and slope stability), International Seminar: “*Estudio de la peligrosidad y gestión de riesgos por movimientos en laderas inestables*”, sponsored by UNESCO, CYTED, and INTER, Managua, Nicaragua, November 12-16, 2007

**Jaramillo Nieves, L.G.**, “Inestabilidad de laderas: aspectos científicos y planificación” (Slope Stability: scientific and planning aspects), International Seminar: “*Estudio de la peligrosidad y gestión de riesgos por movimientos en laderas inestables*”, sponsored by UNESCO, CYTED, and INTER, Managua, Nicaragua, November 12-16, 2007

**Jaramillo Nieves, L.G.**, Lithosphere, biosphere, and other spheres: between the Earth and evolution, 2007, International Congress: Gaia and climate change, University of Puerto Rico, Río Piedras, April 19-21, 2007.

**Jaramillo Nieves, L.G.**, Remote sensing evaluation of regional chemistry and element dispersion of porphyry copper deposits in the Silver Bell Mountains, Arizona, 17th Caribbean Geological Conference, Geology Department, Univ. of Puerto Rico, Mayagüez, July 17-21, 2005, San Juan, P.R.

**Jaramillo Nieves, L.G.**, Consideration of natural disasters in the Caribbean: geologic factors and implications for planning, International Seminar of Natural Disasters and Emergencies, Santo Domingo, Dominican Republic., March 17-18, 2005.

**Jaramillo Nieves, L.G.**, Geology and physiography of Puerto Rico, Workshop for Inspectors in the Ground Water Injection Program, Environmental Protection Agency (EPA), Experimental Station, San Juan, Puerto Rico, December 2004.

#### **POSTER PRESENTATIONS:**

**Jaramillo-Nieves, L.G.**; How I managed to talk about disasters to the general public, Science and Society: Science Communication Practice, Research, and Reflection II Session, American Geophysical Union Fall Meeting, Virtual Meeting, December 11, 2020.

**Jaramillo-Nieves, L.G.**; Briones, F.; Davis, L.A.; Leckey, E.H.; Vachon, R., One Community at a Time: Local History, Regional Geology, and Social Science as a Foundation for Resilience in Communities in Puerto Rico after Hurricane María, AGU Fall Meeting, San Francisco, December 9-13, 2019.

**Jaramillo Nieves, L.G.**, “El terremoto en Puerto Rico, lecciones cien años después, el uso de la historia puertorriqueña para acciones de prevención en comunidades de Puerto Rico” (The 1918 earthquake in Puerto Rico, lessons one hundred years later. Using Puerto Rican history for preventive action in communities of Puerto Rico), II Symposium of Disaster Risk Management and Coping with Climate Change, in XII International Convention on Environment and Development, Havana, Cuba, July 1-5, 2019.

<http://www.cubambiente.com/es/default/principal>



**Jaramillo Nieves, L.G.**, Atkinson, W. Jr., and Gray, F., Remote Sensing evaluation of element dispersion characteristics of porphyry copper deposits in the Silver Bell Mountains, Geological Society of America, Cordilleran Section, 99<sup>th</sup> Annual Meeting, Puerto Vallarta, Mexico, April 1-3, 2003.

#### **PRESENTATIONS AND PUBLICATIONS FOR THE GENERAL PUBLIC:**

**Jaramillo Nieves, L.G.**, Seismic Awareness: an issue of memory, history and action, Second Day of Disaster Prevention, College of General Studies, University of Puerto Rico, Río Piedras, April 22, 2024, <https://youtu.be/DXq5Gc5cGW4> [Presentation]

**Jaramillo Nieves, L.G.**, Climate Change and Islands, Food Security and the Church, *3er Encuentro Latino de Educación Teológica (3ELECT)*, June 4, 2021, [Presentation]

**Jaramillo Nieves, L.G.**, 2020, January 7 Seismic Sequence and Individual Lessons, *Hola MT*, Journal of Medical Technologist of Puerto Rico, Vol. 37, No. 1, p.17-23, <https://portal.tecnologosmedicos.org/publication/hola-mt1-2020/> [Publication]

**Jaramillo Nieves, L.G.**, January 7 Seismic Sequence in Southwest Puerto Rico, NUC University, Mayaguez, Puerto Rico, January 1<sup>st</sup>, 2020. [Presentation]

**Jaramillo Nieves, L.G.**, The Earthquake in Puerto Rico: lesson one hundred years later (*El terremoto de Puerto Rico, lecciones cien años después*), Find your place at the library, Library System, University of Puerto Rico, April 20-25, 2020. [Presentation]

**Jaramillo Nieves, L.G.**, Seismic Activity in Puerto Rico, what is it and how to prepare (*Actividad sísmica en Puerto Rico: ¿Qué es y cómo prepararse?*), Santander Bank, San Juan, Puerto Rico, January 28, 2020, (After the 2019-2020 Puerto Rico Seismic Sequence). [Presentation]

**US Geological Survey, University of Puerto Rico, and Natural Hazards Center**, Landslides Guide for Residents in Puerto Rico, [https://hazards.colorado.edu/uploads/documents/PuertoRico\\_LandslideGuide\\_2020.pdf](https://hazards.colorado.edu/uploads/documents/PuertoRico_LandslideGuide_2020.pdf)  
Role in publication: Reviewer [Publication]

**Acevedo Vélez, G.D., Archilla Pagán, L.A., Barreto Vélez, T., Castillo Carrasco, A., González Albó, A., Chan Santiago, J., Ramírez Rivera, C., Rodríguez Acevedo, X., Figueroa Muñiz, M.J., Machargo Pérez, A.J., Gorbea Finalet, R., Jaramillo Nieves, L.G., Peraza Díaz, P. y Velázquez Lamela, D.**, 2018, Geologic vulnerability in Puerto Rico and hurricane María (La vulnerabilidad geológica de Puerto Rico y el huracán María), *Intersecciones* No. 2., [Publication]

#### **RADIO SEGMENTS:**

**Jaramillo Nieves, L.G., Vega Lugo, R., and Colón Morera, J.J.**, The importance of history for the study of disasters, <https://podcasts.apple.com/us/podcast/la-importancia-de-la-historia-para-el-estudio/id1511178129?i=1000549709441>  
<https://www.listennotes.com/podcasts/hilando-fino/la-importancia-de-la-nXe59LHRPE3/>

<https://podcasters.spotify.com/pod/show/hilandofino/episodes/La-importancia-de-la-historia-para-el-estudio-de-los-desastres-220201-e1dnvh> , January 25, 2022. Complete one hour program

**Jaramillo Nieves, L.G., Ríos Villarini, N., Santos Hernández, J., and Colón Morera, J.J.**, The memory of events that caused disasters in Puerto Rico,

<https://www.listennotes.com/podcasts/hilando-fino/la-memoria-de-eventos-que-NtVFGKADyMi/>

<https://open.spotify.com/episode/2zNhweUXIKSomzddRmkfqq> , February 8, 2022. Complete one hour program

**Jaramillo Nieves, L.G., Izquierdo Encarnación, J., and Colón Morera, J.J.**, Methods for the protection of structures against seismic events, <http://www.wrtu.pr/programas/hilandofino/>, March 10, 2022. Complete one hour program

**Jaramillo Nieves, L.G., González López, L., Jiménez Montano, M., and Colón Morera, J.J.**, Cultural heritage and the seismic sequence in Puerto Rico, <http://www.wrtu.pr/programas/hilandofino/>, May 5, 2022. Complete one hour program

**Jaramillo Nieves, L.G. and Guilbe, C.**, The seismic activity in Puerto Rico, Hilando fino, <http://www.wrtu.pr/programas/hilandofino/>, January 18, 2020. Complete one hour program

**Jaramillo Nieves, L.G.**, Terremoto en Puerto Rico el 11 de octubre de 1918; Lecciones 100 años después (*The Earthquake in Puerto Rico: lesson one hundred years later*), Hilando fino, <http://www.wrtu.pr/programas/hilandofino/>, September 16, 2019. Complete one hour program

**Jaramillo Nieves, L.G.**, Expert analysis on tsunami phenomena in Puerto Rico, Analysis Segment, Today in the News, Radio Universidad (WRTU), December, 2007.

#### **INSTITUTIONAL FUNDS AS PRINCIPAL INVESTIGATOR:**

Summer, 2011

##### **Summer Fellowship for Overseas Research**

Granted by the *Iniciativas de Investigación y Actividad Creativa Subgraduada, iNAS*, (Research Initiatives and Undergraduate Creative Activities) and the Department of Education for the development of research at the undergraduate level.

*Study of mass wasting related to the geology and hydrology of areas in Barranquilla, Colombia*

Funds: \$4,563.95

2008-2010

##### **Groundwater and flow modeling of the Yabucoa Aquifer, Puerto Rico: a case study for the tropics.**

UPR Institutional Funds

Funds: \$24,964.00

#### **EXTERNAL FUNDS AS SUBAWARD:**

June 2019

##### **Project Biology with X-Rays Lasers**, The Research

May 2023

Foundation of the State University of New York, Dr. Edward Snell (PI), Dr. Lorna G. Jaramillo Nieves (Sub recipient PI) Managed as Assistant Dean of Research

Funds: \$80,000 annually

**EXTERNAL FUNDS AS PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR:**

- January 2025      **Building Geological Hazards Capacity in Puerto Rico**  
Collaborative Agreement, US Geological Survey, Department of the Interior  
Project number: G25AC00152-00  
Funds: \$400,000
- July 2021      **Seismic activity in Puerto Rico and the protection of cultural heritage.**  
Puerto Rican Endowment for the Humanities (*FPH*, Spanish Acronym), National Endowment of the Humanities (NEH)  
Project number: FPH-33-2021  
Funds: \$46,102
- June 2019      **Conference Travel Fund**  
*Sloan Scholars Mentoring Network, SSMN, Social Science Research Council*  
Funds: \$1,500
- May 2019      **Project One community at a time**, Celebrate 100 Grant,  
American Geophysical Union  
Funds: \$9,836
- June 2018      **Conference Travel Fund**  
*Sloan Scholars Mentoring Network, SSMN, Social Science Research Council*  
Funds: \$2,054

**FELLOWSHIPS AND SCHOLARSHIPS:**

- 2003      **Bill Hiss Creativity Travel Award**  
Department of Geological Science  
University of Colorado, Boulder
- 2000 and 2002      **Longley, Warner & Whalstrom Scholarship**  
Ph.D. Thesis Support
- 1999–2003      **American Geological Institute Minority Scholar**  
Fellowship granted by the American Geological Institute for Minority Groups enrolled in a Master and Doctoral degree.
- 1999-2002      **Alfred P. Sloan Fellowship**  
Fellowship granted by the Alfred P. Sloan Foundation to outstanding students for full tuition expenses.

**AWARDS:**

2020

**Citizen's Award for Exceptional Service**

U.S. Geological Survey

2003

**Best Poster Presentation**

*Remote Sensing evaluation of element dispersion characteristics of porphyry copper deposits in the Silver Bell Mountains*

Geological Society of America

Cordilleran Section, 99<sup>th</sup> Annual Meeting

Puerto Vallarta, Mexico

1996

**Harry H. Hess Award**

Highest General Point Average (GPA)

Geology Department

Commencement Ceremony

University of Puerto Rico, Mayagüez

1995

**Paper Award AGU**

*Sector collapse in island arc volcanoes and implications for hazard assessment: a digital topographic and bathymetric investigation of Qualibou Depression*

American Geophysical Union Annual Meeting Paper Contest (Second Place)

1991

**London International Youth Science Fortnight Fellowship (LIYSF), United Kingdom**

Founded in 1959, LIYSF aims to give a deeper insight into science and its applications for the benefit of all mankind and to develop a greater understanding between young people of all nations.

1991

**42<sup>nd</sup> International Science and Engineering Fair (ISEF), Orlando, Florida**

*Geomorphological Changes in the Northern Coast Between Punta Cangrejos and Punta Vacía Talega in Loíza After Hurricane Hugo in 1989.*

American Geological Institute, AGU (Second Place)