Lina C. Pérez-Ángel

Voss Postdoctoral Research Associate in Environment and Society at Brown University

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Education

- 2016 2022 | PhD in Geological Sciences, University of Colorado Boulder, USA.
 Thesis: "A refinement of biomarker-based tools to study the Pliocene-Pleistocene climate evolution of the northern Tropical Andes" Advisors: Dr. Julio Sepúlveda and Dr. Peter Molnar.
- 2010 2015 | BSc in Geosciences, Minor in Photography, Universidad de Los Andes, Bogotá, Colombia.

Appointments

- *November 2022 present* / Voss Postdoctoral Research Associate in Environment and Society at the Institute at Brown for Environment and Society (IBES) and the Department of Earth, Environmental, and Planetary Sciences (DEEPS), Brown University, USA.
- *May October 2022 /* Postdoctoral Research Associate at the Institute of Arctic and Alpine Research (INSTAAR)¹, University of Colorado Boulder, USA.

Publications

- Martínez-Sosa, P., Tierney, J. E., Pérez-Angel, L.C., Stefanescu, I., Guo, J., Frédérique, K., Sepúlveda, J., Peterse, F., Shuman, F., Reyes., A. (2023) Development and application of the Branched and Isoprenoid GDGT Machine learning Classification algorithm (BIGMaC) for paleoenvironmental reconstruction. *Paleoceanography and Paleoclimatology* 38, no. 7 (2023): e2023PA004611. https://doi.org/10.1029/2023PA004611
- Ortiz-Guerrero, C., Montes, C., Farris, D., Agudelo, C., Ariza, M., Ayala, J., Avellaneda, J., Cortes, A., Gaitan, E., Garzon, S., Gongora, D., Jara N.A., Meza, C., Pérez-Angel, L.C., et al. (2023). Crustal Structure of the Western Azuero Peninsula, Panama: Insights into the structure of accretionary complexes and forearc ophiolites. *International Geology Reviews*. <u>https://doi.org/10.1080/00206814.2023.2191678</u>.
- Pérez-Angel, L.C., Sepúlveda, J., Montes, C., Smith, J.J., Molnar, P., González-Arango, C., Snell, K., Dildar, N. (2022). Mixed Signals from the Stable Isotope composition of Precipitation and Plant Waxes in the Northern Tropical Andes. *Journal of Geophysical Research: Biogeosciences*, 127, e2022JG006932. https://doi.org/10.1029/2022JG006932
- Goldman, A. E., S. R. Emani, L. C. Pérez-Angel, J. A. Rodríguez-Ramos, and J. C. Stegen. (2021). Integrated, Coordinated, Open, and Networked (ICON) Science to Advance the Geosciences: Introduction and Synthesis of a Special Collection of Commentary Articles. Earth and Space Science. https://doi.org/10.1029/2021EA002099
- Molnar, P. & Pérez-Angel, L. C., (2021). Constraints on the paleo-elevation history of the Eastern Cordillera of Colombia from its palynological record. Geosphere, 17(4), pp.1333-1352. <u>https://doi.org/10.1130/GES02328.1</u>.
- Goldman, A. E., S. R. Emani, L. C. Pérez-Angel, J. A. Rodríguez-Ramos, J. C. Stegen, and P. Fox (2021), Special collection on open collaboration across geosciences, *Eos*, 102, <u>https://doi.org/10.1029/2021EO153180</u>.
- Montes, C., Silva, C.A., Bayona, G.A., Villamil, R., Stiles, E., Rodriguez-Corcho, A.F., Beltran-Triviño, A., Lamus, F., Muñoz-Granados, M.D., **Pérez-Angel, L.C.** and Hoyos, N., (2021). A middle to late Miocene

¹Started at Cooperative Institute for Research in Environmental Sciences (CIRES) and switch to INSTAAR in July of 2022

trans-Andean portal: geologic record in the Tatacoa Desert. *Frontiers in Earth Science*, 8, p.643. https://doi.org/10.3389/feart.2020.587022.

- Pérez-Angel, L.C. (2020). Measuring past terrestrial temperatures with bacterial lipids. *Nature Reviews Earth & Environment*, <u>https://doi.org/10.1038/s43017-020-0098-y</u> (invited, non-peer review)
- Pérez-Angel, L. C., Sepúlveda, J., Molnar, P., Montes, C., Rajagopalan, B., Snell, K., Gonzalez-Arango, C., Dildar, N., (2020). Soil and air temperature calibrations using branched GDGTs for the Tropical Andes of Colombia: Toward a pan-tropical calibration. *Geochemistry, Geophysics, Geosystems*, 21, e2020GC008941. <u>https://doi.org/10.1029/2020GC008941</u>
- Pérez-Angel, L.C., (2019). Estimando paleo-temperaturas del Plioceno para pronosticar el clima del 2100. Revista Energia & Geociencias de la Asociacion Colombiana de Geólogos y Geofísicos del Petróleo (Article in *Spanish*, non-peer review)
- Pérez-Angel, L. C., & Molnar, P. (2017). Sea surface temperatures in the eastern equatorial Pacific and surface temperatures in the Eastern Cordillera of Colombia during El Niño: Implications for Pliocene conditions. *Paleoceanography*, 32, 1309–1314. <u>https://doi.org/10.1002/2017PA003182</u>
- Montes, C. Cardona, A., Jaramillo, C. Pardo, A. Silva, J.C., Valencia, V., Ayala, C, Pérez-Angel, L.C., Rodriguez-Parra, L.A., Ramirez, V., Niño, H., 2015, Middle Miocene closure of the Central American Seaway, Science, v. 348, pp. 226-229. <u>https://doi.org/10.1126/science.aaa2815</u>
- Pérez Angel, L. C. (2015). Structural characterization of the Azuero-Sona fault zone (Bachelor's thesis, Bogotá-Uniandes).

In Prep Manuscripts

- **Pérez-Angel, L.C.**, Sepúlveda, J., Molnar, P., Eaman, K., Parrado, A., Mora-Páez, H., Gonzalez-Arango, C., Snell, K., Dildar, N. Warm Pliocene temperatures in the northern Tropical Andes.
- Pérez-Angel, L.C., Molnar, P., Sepúlveda, J., Eaman, K., Baniowda, H., Montes, C., Dildar, N. Paleoelevation history of the Eastern Cordillera of Colombia Reconstructed by biomarker-based temperatures.

Invited Research Talks

- May 2023 / Reconstruction of Pliocene-Pleistocene Climate of the Tropical Andes using Organic Geochemical Tools. COG³ Seminar. Earth, Atmospheric and Planetary Sciences department. Massachusetts Institute of Technology (MIT), MA, USA.
- *March 2023* / Using organic geochemistry to reconstruct paleoclimate in mountainous regions: A Pliocene-Pleistocene study in the tropical Andes of Colombia. Department of Geological & Environmental Sciences Seminar. Appalachian State University, NC, USA.
- January 2023 / Pliocene-Pleistocene temperature reconstruction in the tropical Andes of Colombia using lipid biomarkers. Earth and Space Sciences Colloquium at University of Washington, WA, USA.
- *December 2022* / Disentangling Mixed Organic Sources in Sedimentary Systems Using Biomarker Proxies: A Pliocene-Pleistocene Paleotemperature Record from the Tropical Andes. AGU Fall Meeting. Session: PP13C-08 Organic Compounds as Environmental Proxies: Development, Calibrations, and Applications.
- October 2022 / A Refinement of Biomarker-based Tools to Study the Pliocene-Pleistocene Climate Evolution of the Northern Tropical Andes. Geological Sciences Seminar Series at University of Florida, FL, USA.
- *October 2022 /* Pliocene-Pleistocene temperature reconstruction in the tropical Andes using lipid biomarkers. Paleo/Environmental seminar series, Department of Earth Sciences at the University of Southern California, CA, USA. (virtual).
- *April 2022* / Pliocene-Pleistocene temperatures in the tropics reconstructed from bacterial lipids. Pegrum Lecture series at the Geology Department, University at Buffalo, NY, USA.
- *November 2021* / Biomarkers as a tool to reconstruct climate in the northern Tropical Andes. Sedimentary Geology Seminar, University of Houston, TX, USA (virtual).
- *October 2021* / Pliocene-Pleistocene temperatures in the tropics reconstructed from bacterial lipids. Department of Atmospheric, Oceanic, and Earth Sciences Geology seminar series at George Mason University, Fairfax, VA, USA (virtual).

March 2019 / ¿El fenómeno del Niño puede levanter una montaña? Reinterpretación del registro Plioceno en Colombia. Colloquium at the Physics and Geosciences department, Universidad del Norte, Barranquilla, Colombia (in *Spanish*).

Invited Education and Diversity Talks

- *December 2023* / CLUE: The Climate Mystery Game, An Earth Science Outreach and Education Program for Young Generations. ED52A-08. Will present at AGU Annual Meeting. Session ED52A: Empowering a Diverse and Global Earth and Space Science Community Through Education and Public Engagement.
- October 2023 / Paleoclimatology and how to use biomarkers to better understand changes in the environment. Hispanic and Latinx Heritage Month Celebration at the Museum of Science in Boston, Mass.
- December 2022 / AGU ICON (Integrated, Coordinated, Open, and Networked) group to advance collaboration across the geosciences. AGU Fall Meeting. AGU Town Hall: Toward Increasing Justice, Equity, Diversity, and Inclusion (JEDI) and Community Engagement in Climate Research: Challenges, Opportunities, and Successes in Scientific Publishing. Invited Panelist.
- September 2020 / '<u>El Niño y La Niña</u>' by Con-Ciencia en Las Américas: Conversaciones en Español sobre el Cambio Global, You Belong @ Standford Earth. (Virtual, *Spanish*).
- *May 2021 / Un chat con la tierra* with GeoLchat, a bilingual science communication project. Colloquium at the Physics and Geosciences department, Universidad del Norte, Barranquilla, Colombia (virtual, *Spanish*).
- *February 2019* / Promoting Geoscience Research, Education, and Success (PROGRESS) workshop at Colorado State University. Invited Panelist.

Research Grants, Awards, & Fellowships

- 2023 / Lead-PI for NSF proposal "Pliocene-Pleistocene hydroclimate in northern South America as an analogue for future rainfall regimes in the 21st century". \$398,089. *Submitted* to P4Climate program.
- 2022 / Voss postdoctoral research fellow at the Institute at Brown for Environment and Society (IBES) at Brown University; \$134,000. Proposal: Reconstructing tropical climate during warmer-than-present interglacials as analogues for future rainfall regimes in the 21st century.

Co-PI for the extension of NSF proposal "Evolution of Pliocene-Pleistocene climate and vegetation of the Tropical Andes", \$99,754 funded by the Sedimentary Geology and Paleobiology program (originally funded in 2019; \$497,116).

- 2021 / Recipient of the 2021-2022 University Graduate School Fellowship from the Department of Geological Sciences at the University of Colorado Boulder.
- 2020 / Recipient of the Stephen Evan Scholarship by the Geological Sciences department at CU Boulder which recognizes the stellar record of a graduate student each year in the Department, \$2,000.
 Outstanding student award from the Association of Women Geoscientist Laramie.
 Geological Society of America (GSA) graduate student grant, \$1,250.
- 2019 / CIRES Innovate Research Proposal: "Soil Temperature Calibration and Paleoaltimetry of the Tibetan Plateau", \$24,984. Awarded to Peter Molnar and Lina C Pérez-Angel.
 Responsible for the gathering and analysis of pilot data and co-writing initial drafts of the NSF proposal "Evolution of Pliocene-Pleistocene climate and vegetation of the Tropical Andes", \$497,116, funded by the Sedimentary Geology and Paleobiology program (PIs: Julio Sepúlveda and Peter Molnar).
 Beverly Sears' Graduate Research Grant "Pliocene-Pleistocene climate in the Tropical Andes: a case of study in the Eastern Cordillera of Colombia", \$1,000.
- 2018 / CIRES Graduate Student Research Award. Topic: Pliocene tropical climate, mountain building, and the closure of Central American Seaway, this program aims to promote student scholarship and research excellence.

Honorable Mention Award of the Figueroa Family Fellowship at CU Boulder, \$500.

2017 / CIRES Innovate Research Proposal: "Pliocene temperatures from the tropics: the Eastern Cordillera of Colombia", \$24,536. Awarded to Lina C. Pérez-Angel and Peter Molnar.

Lewis and Clark Field Scholars: "Pliocene Paleoclimate of the Eastern Cordillera of Colombia: An Analog for a future warm world", \$5,000.

Edward Fellowship by the Geological Sciences department at CU Boulder: "Evolution of Pliocene-Pleistocene climate vegetation of the Tropical Andes", \$1,000.

XV Fondo Corrigan, Asociación Colombiana de Geólogos y Geofísicos del Petróleo (ACGGP) Corporación Geológica ARES: "Pliocene Paleoclimate of the Eastern Cordillera of Colombia: An Analog for a Future Warm World", ~\$3,300 -10,000,000 COP-

Grants and Awards for Education and Diversity Initiatives

- 2023 / Paleontological Society Outreach & Education Grant with "GeoLchat Fossil Edition: A Bilingual Science Communication Project in Paleontology Using Social Media", \$2,500. Awarded to the GeoLchat team.
- 2020 /Mini-grant from Black in Science Communication Week sponsored by COMPASS, \$500. Awarded to the GeoLchat team.
- 2019 / Office of International Education's Muneeb Kamal International Student of the Year Award at University of Colorado Boulder which honors and recognizes outstanding contributions to international understanding by a member of the community.

Presentations at Scientific and Education Meetings

 2023 / Pliocene Hydroclimate of the Northern Tropical Andes. Session PP21E: Hydroclimate Lessons from Cenozoic Paleoclimates. AGU23. (Poster, December 12th).
 Pliocene-Pleistocene Paleohydrological reconstruction of the Tropical Andes of Colombia. XXI INQUA

2023. Session 103: Terrestrial hydroclimates: towards quantification and climate model comparisons. (Poster, July18th).

Plio-Pleistocene climate and environmental reconstruction in the Bogotá basin, northern tropical Andes of Colombia. Goldschmidt. Session: Organic geochemical tools to understand life, climate, and environments through time. (Poster, July 11th).

2022 / A Pliocene-Pleistocene temperature reconstruction from the tropical Andes of Colombia. Galileo conference: "The warm Pliocene: Bridging the geological data and modelling communities" workshop, Leeds, United Kingdom. (Talk, August 24th-26th).

A Pliocene-Pleistocene brGDGT-based temperature reconstruction from the Tropical Andes of Colombia. Gordon Research Conference (GRC) in Organic Geochemistry, Holderness, NH, USA. (Poster, August 1st-5th).

2021 / A biomarker-based Pliocene-Pleistocene temperature reconstruction of the Northern Tropical Andes from the Funza-II core. AGU Fall Meeting, New Orleans, Louisiana. Session GC55C: Changes and Impacts of Climate Variability in South America. (Poster, December 17th).

Stable isotopes of plant waxes in the Northern Tropical Andes of Colombia: a proxy for paleoaltimetry studies? Geological Society of American (GSA) annual meeting in Portland, OR. session D13: Recent advances in Paleoclimatology/Paleoceanography. <u>https://doi.org/10.1130/abs/2021AM-369674.</u> (Talk, October 12th)

- 2020 / Soil and Air Temperature Calibrations Using Branched GDGTs for the Tropical Andes of Colombia: Towards a Pantropical Calibration. AGU Fall Meeting. Session: PP048 - Development and Application of Quantitative Proxies of Terrestrial Climate Variability (Talk).
 Removing Barriers for Girls to Enter STEM Pathways in a Dynamic World: Challenges During COVID-19 Times. National Science Teaching Association conference (National Science Teaching Association) by Gianna Sullivan, Lina C. Pérez-Angel & Rachel Fox Freeman (Talk, July 30th)
- 2019 / An improved regional branched GDGT-based soil temperature calibration for the Tropical Andes of Colombia: Towards a global calibration for the tropics. Goldschmidt Barcelona, Spain. (Talk)
 An improved regional branched GDGT-based soil temperature calibration for the Tropical Andes of Colombia: Towards a global calibration for the tropics and a future work in China, DUST PIRE Summer Workshop. Hawaii, US (Talk)

2017 / Sea Surface Temperatures in the Eastern Equatorial Pacific and Surface Temperatures in the Eastern Cordillera of Colombia during El Niño: Implications for Pliocene Conditions. AGU New Orleans, Louisiana. (Poster, 11-15th December).

Environmental evolution of the Tropical Andes during the Pliocene-Pleistocene transition. 1st Rocky Mountain Geobiology Symposium. (Poster, 8th April).

- 2016 / First structural characterization of the Azuero-Sona Fault. II General Assembly of the Latin America and Caribbean Seismological Commission. San José, Costa Rica. (Talk, 20-22 June)
- 2014 / Susceptibilidad magnética en el pozo Guamo I. XI Semana Técnica de Geología & I Geosciences Annual Meeting at the Universidad Industrial de Santander (UIS). (Poster, 11 15 August)

Leadership in Education, Diversity & Science Communication initiatives and outcomes

- 2023 / Sustainability chair for the executive committee of GeoLatinas. Elected by members for the 2023-2025. Curriculum development and implementation of "<u>Climate Histories: Archives, Seasonality, and the Tropics</u>" Lesson. Four modules of Climate Justice activities for 5th graders in Providence, RI. Collaboration with Dr. Jayson Porter and 5th graders of South Side Elementary School. Curriculum development of "CLUE: The Climate Mystery Game, An Earth Science Outreach and Education Program for Young Generations" in partnership with the Girls at the Museum Exploring Science (GAMES) program and the Museum of Natural History at the University of Colorado Boulder (CUMNH). Implementation at a summer school in Boulder, CO on June 19th 23rd.
- 2022 / Ortiz-Guerrero, C., Pérez-Angel, L.C., & Muñoz-Granados, D.M. <u>GeoLchat: A bilingual Science</u> <u>Communication Experiment of Three Colombian Geoscientist</u>" blog post in both English and *Spanish*:
 "GeoLchat: el experimento de divulgación científica bilingüe hecho por tres geocientíficas colombianas" for the EGU Blogs: Geodynamics division.
- 2021 / Leadership team member for 500 Women Scientist Boulder Pod (Fall 2020 to Spring 2022).
 Pérez-Angel, L.C., Santiago Ramos, D.P, Caballero-Gill, R.P. <u>The PERLA of our GeoLatinas'</u> community. GeoLatinas blog: A place to learn, inspire, empower and amplify your voices.
- 2020 / Member of the advisory committee for Girls at the Museum Exploring Science (GAMES) at the Museum of Natural History at the University of Colorado Boulder (CUMNH), to evaluate how to adapt this outreach program during COVID-19.
- 2019 /Ortiz-Guerrero, C. & Pérez-Angel, L.C. Y...; Qué onda con los terremotos en Colombia? a blog post for Ciencia Legible of Shots de Ciencia (*Spanish*).
- 2017 / Development of "Are they melting? Reconstructing past climates to understand our changing world". Implemented at Expanding Your Horizons conference for middle school girls at the University of Colorado Boulder (February 24th).
- 2015 / Co-founder of GeoLchat; a bilingual (English and *Spanish*) science communication project in social media (@geolchat) that aim to connect and promote the work of Earth, Planetary, and Atmospheric scientists from all over the world, standing for diversity and inclusion.

Education, Outreach, Diversity & Science Communication activities

2023 / AGU Voices for Science 2023-2024 cohort. Communications/Media track. Tenure letter upon request.

- 2021 / Moderator of a breakout session at the NSF INCLUDES Symposium for ADVANCING Latinas in STEM Academic careers entitled: "Turning the Tide: Using Our Stories to Create Change from Within for Success in STEM Academic and Industry Careers" sponsored by Geolatinas (April 9th)
- 2020 / Invited speaker to "Tiempo, Clima y Tierra" a podcast in Spanish host by Dr. Ángel F. Adames-Corraliza in an episode called "Paleoclima con Lina Pérez Ángel".

Presenter at the CIRES/NOAA Series 'La Ciencia-en-Casa" in "<u>Paleoclimatólogos: detectives del clima</u>" (*Spanish*, November 5th).

Volunteer mentor with the Girls at the Museum Exploring Science (GAMES) program (Since Fall 2018).

- 2019 / Speaker in the Accessible Science Initiative organized by Dr. Olga Peña with schools from Colombia called "Club STEMinista" talking about the environment "<u>Medio Ambiente</u>" (*Spanish*, April 30th).
 Volunteer for the Organic Geochemistry laboratory tour at INSTAAR Open House for 8th grade students from Southern Hills middle school (April 25th).
- 2018 / Middle School Field Trip volunteer: Introduction to Front Range Geology, Platt Middle School CHOICE students (October 26th).

Workshop leader at the implementation of "Are they melting? Reconstructing past climates to understand our changing world" outreach activity at Expanding Your Horizons conference for middle school girls (February 24th).

2017 / Paleoclimate workshop with the 9th grade Earth Science class of Ms. Bobb at the Denver East High School, Colorado, USA (May 9th).

Volunteer laboratory tour and activity facilitator for CU Boulder Earth Systems Stable Isotope Laboratory. Girls at the Museum Exploring Science (GAMES) program for elementary school girls (February).

Additional Research experience

- 2019 / Laboratory work at the Stable Isotope Biogeochemistry Lab in collaboration with Dr. Weiguo Liu and Dr. Huanye Wang at IEECAS in Xi'an, China (July)
- 2016 / Research assistant in the Geoscience department at Universidad de Los Andes, Bogotá, Colombia (January August)
- 2015 / Volunteer assistant in the Organic Geochemistry Lab at INSTAAR, University of Colorado, Boulder (September November)
- 2014 / Assistant in Paleogeography of the North of South America project (January May). Geological mapping fieldwork of Siamana formation reefs in 'Valoración de la Biodiversidad del pasado' project of Universidad Del Norte, Smithsonian Tropical Research Institute and University of Zurich (January).
- 2013 / Fieldwork assistant in Paleogeography of the North of South America project (January and June)
- 2012 / Former Volunteer at the Center for Tropical Paleoecology. Smithsonian Tropical Research Institute (Summer)

Fieldwork experience

2019 / Field season in China and Tibet (from Shaanxi to Qinghai) for fa project using brGDGTs for paleoelevation estimates in Tibet (8 days).

Field assistance for Structural geology class in Sierra Nevada de Santa Marta, Universidad del Norte, Colombia (5 days).

- 2017 / Field season for my PhD project in the Eastern Cordillera of Colombia (20 days).
- 2016 / Field lead assistance during the research position at Universidad de Los Andes in the Nueva Esperanza, Pereira, and La Alta Guajira projects (20 days).
- 2015 / Field assistance for Artist Irene Kopelman in Tatacoa desert, Huila (10 days).Field assistance in Advance field camp course in Azuero, Panamá (~3 weeks).

2014 / Field assistance in structural geology fieldwork in Utica, Cundinamarca and Abejorral, Antioquia (1 week).
 Advanced field course: Field Camp in Azuero, Panamá (3 weeks).
 Advanced field course: Carbonate vs. Siliciclastic sedimentary environments (1 week).
 Geological mapping fieldwork of La Guajira. 'Valoración de la Biodiversidad del Pasado' project.

Universidad Del Norte, Smithsonian Tropical Research Institute, and University of Zurich (15 days).

2013 / Field assistant in structural and tectonics fieldwork in Abejorral, Colombia (1 week).
 Fieldwork with Gigapan in Santander, Colombia in Paleosogamoso project of Smithsonian Tropical Research Institute (3 days).
 Field assistant in 'Paleogeography of the North of South America' project. Antioquia, Colombia (5 days).

Field assistant in 'Paleogeography of the North of South America' project. Antioquia, Colombia (5 days). Field assistant in geology fieldwork in Boyacá, Colombia (3 days).

Field assistant in geology course fieldwork in El Cocuy, Colombia (1 week).

- 2012 / Field assistant in geology fieldwork at Universidad de Los Andes, Colombia (10 days)Field volunteer in the CTPA, Smithsonian Tropical Research Institute (~1 month)
- 2012 2014 / Basic undergraduate field courses (~24 days)

Teaching and Education experience

- 2023 / Inclusive STEM Teaching Project <u>course</u> (Spring). Certificate of completion available upon request. Guest lecture for Past Climates and Paleoclimate Proxies (EACS 231). Pliocene paleoclimate: Permanent El Niño state? Bates College, Maine (Winter).
- 2022 / Guest lecture for Stable Isotope Geochemistry Class at Bates College, Maine (Fall).
- 2021 / Guest lecture for Plate Tectonics (EARTH 146). *Climate and Tectonics*. Department of Earth and Environmental Sciences, University of Michigan, Ann Arbor (Fall).

University of Colorado Boulder, USA

- 2021 / Guest lecture for GEOL 3040: Global Change: Plate tectonics and long-term changes in CO₂ class (Fall). *Faculty observation and evaluation available upon request.*
- 2019 / Guest lecture for GEOL 3040: Global Change: Climate and Tectonics class (Fall)
- 2018 / Introduction to Field Geology GEOL2700 (Teaching Assistant, Spring)
- 2017 / Introduction to Field Geology GEOL2700 (Teaching Assistant, Fall) Introduction to Physical Geology Laboratory GEOL1030 (Spring)
- 2016 / Introduction to Physical Geology Laboratory GEOL1030 (Fall)

Universidad de Los Andes, Bogotá, Colombia (Teaching Assistant in Spanish)

- 2015 / Petroleum, gas, and coal of Colombia (Spring).
- 2014 / Structural Geology and Tectonics, Field work Class (Fall).
 - Geology I (Fall).
 - Introduction to Geoscience (Fall).

Rock forming minerals Class (Spring).

2013 / Structural Geology and Tectonics Class. Field and Analog modelling (Fall)

Geology I, Field and Theory Class (Spring).

2012 / Geology I (Fall).

Introduction to Geosciences (Fall).

Mentoring Experience

- 2022 / Communicator mentor of RESESS intern Shradha Ravikumar at UNAVCO, a summer internship program dedicated to increasing the diversity of students entering the geosciences in Boulder, Colorado, USA. Mentor and supervisor of Professional Research Assistant Katie Eaman in the Organic Geochemistry Laboratory at the University of Colorado Boulder (since September 2020).
- 2021 / Direct mentor of chemical engineer Hanaa Baniowda in the Organic Geochemistry Laboratory at the University of Colorado Boulder, intern sponsored by the Boulder Nablus Sister City Project.
- 2020 / Undergraduate student Caitlin Germana was awarded the Undergraduate Research Opportunities Program fellowship (UROP). Project 'Pliocene tropical climate in the Eastern Cordillera of Colombia' (Fall).
- 2019 / Undergraduate student Katie Quinn. Geology department mentoring program at CU Boulder (Spring).
- 2018 / Jamila Smith, intern at the Summer Multicultural Access to Research Training (SMART) program of the leadership alliance (Summer).

Undergraduate student Katie Quinn with the mentoring program from the Geological Sciences Department (Fall).

2017 / Undergraduate student Nina Kentwortz was awarded the Undergraduate Research Opportunities Program fellowship (UROP) (Summer).

Synergistic Activities

- 2023 | Co-convener and chair of the session "The Power of Science Communication: How to Turn Challenges into Opportunities". AGU annual meeting 2023. San Francisco, CA.
 Guest Editor for the Special Issue "Pliocene Studies in Paleobiology, Paleoenvironment and Paleoclimate". <u>Geosciences (ISSN 2076-3263)</u>.
 Co-convener and chair of the session "Organic geochemical tools to understand life, climate, and environments through time" at Goldschmidt 2023 in Lyon, France.
- 2022 / Early career member of the steering committee for the Galileo Conference: "The warm Pliocene: Bridging the geological data and modelling communities" workshop in Leeds, UK. *M*ember of the advisory board on Integrated, Coordinated, Open and Networked (ICON) group. (Since Fall 2021 to present)
- 2020 2021 | Member of the leadership team for the AGU Special Collection of commentaries on Integrated, Coordinated, Open and Networked (ICON) Collaboration Across Geosciences published on Earth and Space Science. (Fall 2020 to Fall 2021).

Graduate student member of the Unlearning Racism in the Geosciences (URGE) Geological Sciences pod at the University of Colorado Boulder (Spring 2021)

Graduate student representative in the Diversity, Equity, & Inclusion committee of the Geological Sciences department at University of Colorado Boulder (elected by students, from Summer 2020 to Spring 2021)

Leader and facilitator of Geolatinas Professional Exchange for Resilience Leadership and Advancement (PERLA) initiative (January 2020 to Fall 2021).

2019 / Graduate student representative in the Graduate Curriculum Committee of the Geological sciences department at University of Colorado Boulder (Fall).

Member of Geolatinas and SOLESS, both communities are dedicated to increase and reinforce representation of Latinxs/Hispanics in the Earth and Space Sciences (since 2019 until today). Graduate student representative for the Geology Social Misconduct Awareness and Response Team (GeoSMART) (Spring to Fall).

2018 / Co-founder of Geology Social Misconduct Awareness and Response Team (GeoSMART) which links graduate students with the resources at CU Boulder to prevent and eliminate discrimination and harassment based on race, color, national origin, pregnancy, sex, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran (military service) status, political affiliation, or political philosophy (Fall).

Sub-committee member for departmental action team (DAT) which focusses on developing assessments for undergraduate education (Summer).

2013 – 2015 / Vice-president of AAPG Student Chapter at Universidad de Los Andes

2013 – 2014 / Student representative of the Geosciences Department, Universidad de Los Andes

Reviewer for: Geophysical Research Letters, Quaternary Science Reviews, Geology, Journal of South American Earth Sciences, Quaternary International, and Paleoceanography and Paleoclimatology journals.

Courses & Summer Schools

- 2019 / Water isotopes and climate workshop. US CLIVAR (Boulder, Colorado, October 1st-3rd).
 PIRE summer school and workshop: Dust stimulated drawn down of atmospheric CO₂ as a trigger for Northern Hemisphere Glaciation (Hawaii, USA).
- 2017 / PIRE summer school and workshop: Dust stimulated drawn down of atmospheric CO₂ as a trigger for Northern Hemisphere Glaciation (Xi'an, China, July 1st-9th).

<u>IsoCamp</u>: Stable Isotope Biogeochemistry and Ecology summer school (University of Utah, Salt Lake City, Utah, June 12th -23rd).

- 2015 / Graduate Summer School: Mountain ranges and High Plateaus. Camp Davis Rocky Mountain field station, University of Michigan. (Wyoming, USA, August 16th-29th).
- 2013 / Susceptibilidad Magnética: concepto y aplicaciones en geología del petróleo, estudios ambientales y paleoclima (in *Spanish*, Medellín, Colombia, 13 15 June).

Languages

Spanish (native) English (fluent)

Last update: 10/12/23