

# Francisco José Guerrero Bolaño, PhD

## Researcher & Science Communicator

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## CURRENT POSITION(S)

Pacific Northwest National Laboratory

**ICON Science & Communication Research Associate**

2022

Oregon State University, OR-College of Forestry

**Courtesy Faculty Appointee-Summer Instructor**

2020

## EDUCATION

University of Wisconsin-Madison, Water Science Institute | Wisconsin Department of Natural Resources

**Wisconsin Water Science Policy Postdoctoral Fellow**

2019

Project: Improving water quality assessments via effective communication of statistical model outcomes.

Oregon State University, OR-College of Forestry

**Dual Major Ph.D. Sustainable Forest Management & Water Resources Science**

2018

Dissertation: Biogeochemical Signals of Forested Watersheds' Response to Disturbance.

Pontificia Universidad Javeriana, Bogotá, Colombia-College of Engineering

**M. Sc. *cum laude*, Hydrosystems**

2011

Thesis: Biogeophysical Interactions in Particulate Organic Matter Processing in Tropical Streams.

Universidad del Magdalena, Santa Marta, Colombia-College of Science

**B. Sc. *cum laude*, Biology**

2005

Areas of Concentration: Water Resources

Thesis: Leaf Litter Breakdown of Native and Exotic Species in a Neotropical Mountain Stream.

## LANGUAGES

Spanish, native speaker; English, fluent; Portuguese, proficient

## AWARDS

Wisconsin Water Science Policy Fellowship

2019

AAAS Mass Media Fellowship-Summer Intern at CNN Español

2018

International Student Scholarship, Oregon State University

2017

Graduate Student Travel Award, Oregon State University

2017

Dean's Fund for Excellence and Innovation Fellowship, Oregon State University

2016

Outstanding Student Paper Award, American Geophysical Union

2015

1<sup>st</sup> Place, Scholar's Insights (Three-minute Thesis Competition), Oregon State University

2015

Dean's Fund for Excellence and Innovation Fellowship, Oregon State University

2015

## INVITED TALKS

- Should we bury our forest in the bottom of the ocean to fight climate change? Hatfield Marine Science Center Seminar Series. Oregon State University. January 13, 2021-Virtual.
- Effective communication at the science-engineering-policy interface. Environmental Chemistry and Technology & Environmental Engineering Graduate Seminar. University of Wisconsin-Madison. November 5, 2021-Virtual.
- The Science-News Cycle-(Original title in Spanish: El Ciclo de Comunicación de la Ciencia).University of Magdalena-Santa Marta, Colombia. October 7, 2020-Virtual.
- What does the river know about its surrounding forest? Carbon Fluxes in Mountainous Watersheds -(Original title in Spanish: Qué tanto sabe el río del bosque que le rodea? Flujos de Carbono en Cuencas de Montaña). Research Network in Ecohydrology and Ecohydraulics (RedECOHH)-Bogota, Colombia. August 27, 2020-Virtual.
- What does the river know about its surrounding forest? Carbon Fluxes in Mountainous Watersheds -(Original title in Spanish: Qué tanto sabe el río del bosque que le rodea? Flujos de Carbono en Cuencas de Montaña). Federate Center of Forest Sciences. Lima, Peru. July 8, 2020-Virtual.
- “Bytes of Natural History: Disentangling Signals of Watersheds’ Response to Disturbance from Lacustrine Sediments”, Center for Limnology. University of Wisconsin-Madison, February 13<sup>th</sup>, 2019, Madison, WI
- “Decoding Resilience in Mountainous Forested Watersheds: An Analysis of 1500 Year of History in an Oregonian Forest”. Pontificia Universidad Javeriana, June 12<sup>th</sup>, 2017, Bogota, Colombia
- “Decoding Watershed History from Environmental Records”, H. J. Andrews Experimental Forest Long-Term Ecological Research (LTER) 2016 Symposium: "Stories Only Time Can Tell", May 13<sup>th</sup>, Corvallis, OR
- “Biogeophysical Interactions in Particulate Organic Matter Processing in Stream Ecosystems”, Hydrosystems master’s program, Pontificia Universidad Javeriana, May 2015
- “Ecohydrology and Environmental Services”, Hydrosystems master’s program, Pontificia Universidad Javeriana, March 2015

## PROFESSIONAL EXPERIENCE

### WATER RESOURCES CONSULTANT

- Project: Designing A Supplementary Hydro-Meteorological Monitoring Network for Regional Environmental Corporations in Colombia. Institution: National Institute of Hydrology, Meteorology and Environmental Studies (Instituto de Hidrologia, Meteorología y Estudios Ambientales-IDEAM). Role: To assess the technical performance of existing regional hydro-meteorological networks in the Caribbean region of Colombia, and to elaborate upon a technical proposal for a network update and reconnection to the national hydro-meteorological network. Facilitating workshops for the discussion of updated network designs with the participation of representatives from regional environmental corporations. (Bogota, Colombia, August-November 2012)
- Project: A Complexity Approach to the Study of Innovation. Institution: Pontificia Universidad Javeriana. Role: Reviewing and synthesizing existing scientific knowledge of biologically-inspired models of innovation to develop a portfolio of modeling approaches for application to human organizations. (Bogota, Colombia, June 2011-July 2012)
- Project: Implementing the ELOHA (Environmental Limits of Hydrological Alteration) Methodology for the Definition of Environmental Flow Regimes Across the Magdalena-Cauca Rivers’ Basin. Institution: Ingfocol Ltd-The Nature Conservancy. Role: Reviewing and synthesizing existing scientific knowledge of streamflow and aquatic ecology relationships to identify trade-offs between flow alteration and biological conditions across the Magdalena-Cauca Rivers’ basin. Facilitating workshops for methodological validation with the participation of national and international experts. (Bogota, Colombia, May-November 2010)
- Project: Defining an Environmental Flow Regime in High Altitude (Paramo) Tropical Streams. Institution: The Nature Conservancy. Role: To develop an eco-hydrological characterization of four reaches in the Paramo of

Chingaza, including: mapping stream habitats, sampling of biotic communities, analyzing physical-chemical and biological data, and identifying streamflow and aquatic ecology relationships. Presenting results in a public forum. (Bogota, Colombia, May-October 2008)

- **Project:** Formulating an Environmental Management Plan for an Andean Lake, Colombia. **Institution:** BRAIN Ltd. **Role:** To compile and synthesize biological and socio-economic data and to write intermediate and final reports. (Bogota, Colombia, January-June 2008)
- **Project:** Assessing Limnological Conditions of a Tropical Dam on the Magdalena River, Colombia (Betania). **Institution:** Daphnia Ltd. **Role:** Analyzing physical-chemical and hydrobiological data from Betania's dam and writing technical reports. (Bogota, Colombia, November 2007)
- **Project:** Improving Wastewater Management in Bogota: Integrating Heterogeneous Information Systems into a Decision Support System. **Institution:** Pontificia Universidad Javeriana-Bogota's Water and Wastewater Utility Company, **Role:** Reviewing and synthesizing existing scientific knowledge on best management practices in wastewater management to formulate indicators of the environmental performance of wastewater collection and treatment systems. Facilitating workshops for methodological validation with the participation of employees from the Water and Wastewater Utility company. (Bogota, Colombia, December 2007-July 2008)
- **Project:** Assessing Water Quality, Potential Uses, and Sanitation Alternatives in Bogota's Hydrosystem Networks. **Institution:** Pontificia Universidad Javeriana-Bogota's Water and Wastewater Utility Company, **Role:** Analyzing physical-chemical data collected from several urban watersheds in Bogota to calculate water quality indices and feed a geostatistical model of water quality based on Bogota's fluvial network structure. Organizing a short specialization course (34 hours) on "Advances and New Technologies in Wastewater Management: Treatment, Water Quality Indices, and Geostatistical Analyses." (Bogota, Colombia, November 2006-June 2007)

## UNDERGRADUATE RESEARCH ASSISTANT

- **Project:** Guidelines for a program to ensure the water supply of the Gaira River based on the evaluation of the biological integrity of the basin. **Institution:** University of Magdalena - District's Department for the Administration of the Environment (DADMA) **Role:** Designing, implementing, analyzing, and reporting results from a litter decomposition experiment including physical-chemical, hydrological, and biological data. (Santa Marta, Colombia, March 2004 - July 2005).

## WATER SCIENCE RESEARCH

### Publications

- Voter, C. B., **Guerrero-Bolaño, F.**, A. Latzka, B. Maitland & J. Hauxwell. 2021. Adaptable University-Agency Early-Career Fellowship Program Creates a Win-Win-Win for Wisconsin's Waters. *Journal of Contemporary Water Research and Education* 174: 139-154.
- Graça, M. A. S., V. Ferreira, C. Canhoto, A. C. Encalada, **F. Guerrero-Bolaño**, K. M. Wantzen & L. Boyero. 2015. A conceptual model of litter breakdown in low order streams. *International Review Hydrobiology* 100 (1): 1-12
- García, H. A, **Guerrero-Bolaño, F.** & N. Obregón-Neira. 2009. A nested genetic algorithm for the numerical solution of non-linear coupled equations in water-quality modeling. 2nd International Symposium on Computational Mechanics (ISCM II). 12th International Conference on Enhancement and Promotion of Computational Methods in Engineering and Science (EPMESC XII). Hong Kong – Macau
- Castillo, C. Cepeda, C. Díaz, A. Domínguez, E., García, P., **Guerrero, F.**, Hassidoff, A., Saavedra, L., Segura, A. 2008. Evaluación del nivel de aplicación de protocolos de modelación en trabajos sobre simulación del proceso lluvia-escorrentía. *Avances en Recursos Hidráulicos* 19: 55-70. ISSN 0121-5701
- **Guerrero-Bolaño, F.**, L. Nuñez-Galeano & N. Obregón-Neira. 2008. Sistemas Inteligentes y Evaluación de Calidad del Agua en Tiempo Real. *Memorias XVIII Congreso Nacional de Hidráulica e Hidrología* 897 – 904 p. Sociedad Colombiana de Ingenieros, Bogotá, Colombia

- **Guerrero-Bolaño, F.,** A. Manjarrés-Hernández y N. Nuñez-Padilla. 2003. Los macroinvertebrados bentónicos de Pozo Azul (cuenca del río Gaira, Colombia) y su relación con la calidad del agua. Acta Biológica Colombiana 8 (2) 43-55 p.

### In preparation

- **Guerrero-Bolaño, F.,** J. A. Hatten, M. Goñi, A. Gray & Y. Alleau. Broken then Mixed: Muddling of Biospheric POC in Small Mountainous Rivers of the Pacific Northwest (Target Journal: EGU-Biogeosciences)
- **Guerrero-Bolaño, F.,** J. A. Hatten, S. Johnson, A. Argerich & Y. Alleau. Biogeochemical and Erosional Controls of Long-term POC exports from headwaters (Target Journal: Journal of Geophysical Research-Biogeosciences)
- **Guerrero-Bolaño, F.,** J. A. Hatten, K. N. D. Richardson & Y. Alleau. Resilience in source to sink systems: A Millennial Record of Watershed Responses to Disturbance in Loon Lake, Umpqua River Basin, Oregon (Target Journal: EGU-Biogeosciences)

### Academic presentations (*Presenter is underlined*)

- **Guerrero-Bolaño F.J.,** J. A. Hatten., A. Argerich, & S. Johnson. 2021. Biogeochemical and erosional controls on long-term POC exports from headwaters. A C-Quester's Journey. Association for Limnology and Oceanography (ASLO) Aquatic Science Meeting. Virtual. June 22-28. (Oral)
- **Guerrero-Bolaño F.J.,** K. N. D. Richardson, & J. A. Hatten. 2017. Resilience in source to sink systems: A Millennial Record of Watershed Responses to Disturbance in Loon Lake, Umpqua River Basin, Oregon. American Geophysical Union Fall Meeting. New Orleans, Louisiana. December 11-15. (Poster)
- **Guerrero-Bolaño F.J.,** V. Peñaranda & J. A. Hatten. 2017. Decoding resilience in the Oregon Cascades: an analysis of historical trends of streamflow variability. Association for the Sciences of Limnology and Oceanography, Mountains to the Sea, February 26-March 3, Honolulu, Hawaii. (Oral)
- **Guerrero-Bolaño F.J.,** K. Richardson & J. A. Hatten. 2017. The memories of our forests in the Pacific Northwest. Science Talk, Northwest, January 26-27, Oregon Museum of Science and Industry, Portland, OR. (Oral)
- **Guerrero-Bolaño F.J.,** V. Peñaranda & J. A. Hatten. 2016. Information theory and the assessment of hydrological change in freshwater ecosystems. Society for Freshwater Science Annual Meeting, May 21-26, Sacramento Convention Center, Sacramento, CA. (Oral)
- **Guerrero-Bolaño F.J.,** J.A. Hatten, B. Ruddell, V. Peñaranda, and P. Murillo. 2015. Reconstructing Historical Changes in Watersheds from Environmental Records: An Information Theory Approach. American Geophysical Union Fall Meeting, San Francisco, California. December 16-19. **Outstanding Student Presentation Award Winner.** (Oral)
- K. Richardson, K., J.A. Hatten, R. Wheatcroft, **F.J. Guerrero-Bolaño.** 2015. Role of storms and forestry practices in sedimentation in an Oregon Coast Range Lake. American Geophysical Union Fall Meeting. San Francisco, California. December 16-19. (Poster)
- **Guerrero-Bolaño F.J.,** J.A. Hatten, V. Peñaranda. 2015. Assessing hydrological changes in watersheds using information theory. International Forest Hydrology Science Symposium. Portland, Oregon. December 10. (Poster)
- **Guerrero-Bolaño F.J.,** J.A. Hatten. 2015. Constraining uncertainties in long-term particulate organic matter exports by headwater streams. 2015 LTER ASM. From Long-term Data to Understanding: Toward a Predictive Ecology. Estes Park, CO. August 30 - September 2. (Poster)
- **Guerrero-Bolaño, F.J.,** J.A. Hatten. 2015. A Compass for Nature? Entropy in Watershed Responses to Disturbances. American Fisheries Society Annual Meeting. Portland, OR. August 16-20, 2015. (Poster)
- **Richardson, K.N.D.,** J.A. Hatten, R. Wheatcroft, **F.J. Guerrero-Bolaño.** 2015. The Role of Forest Harvest Practices and Extreme Events on the Sedimentation of an Oregon Coast Range Lake. American Fisheries Society Annual Meeting. Portland, OR. August 16-20, 2015. (Oral)
- **Guerrero-Bolaño, F.J.,** J.A. Hatten. 2015. Reconstructing Watershed History from a Sedimentary Hard-Drive. Three-Minute Thesis Competition. Portland, Oregon. May 16, 2015. (Oral)
- **Guerrero-Bolaño, F.J.,** J.A. Hatten. 2015. Reconstructing Watershed History from a Sedimentary Hard-Drive. Scholars' Insights Three-Minute Thesis Competition. Corvallis, Oregon. May 6, 2015. (Oral) First Place presentation for Oregon State University \$1000 cash prize

- **Guerrero-Bolaño, F.J.**, J.A. Hatten. 2015. From molecules to watersheds: hydro-biogeochemical signals of watershed responses to disturbances. 5th Annual Water Research Symposium. Corvallis, Oregon. April 26-28, 2015. (Oral)
- **Guerrero-Bolaño, F.J.**, Hatten JA, Goni MA, Gray AB, Pasternack GB (2014) Geochemical characteristics of overbank deposits after a flood event in a small, mountainous river system the Oregon Coast Range, U.S. AGU Fall meeting, San Francisco, Dec. 15-19. (Poster)
- **Guerrero-Bolaño, F.J.**, J.A. Hatten, and M. Harmon. 2014. Does thinning promote forest resilience? Uncertainties revealed by a biogeochemical modeling approach. Western Forestry Graduate Research Symposium. Corvallis, Oregon. April 21-22. (Oral)
- **Richardson, K. N. D.**, J.A. Hatten, R. Wheatcroft, and **F.J. Guerrero-Bolaño**. 2014. Effect of timber harvest, changes in forestry practices, and natural disturbances on erosion as measured by lacustrine deposits. Western Forestry Graduate Research Symposium. Corvallis, Oregon. April 21-22. (Poster)
- **Richardson\* K.N.D.**, R.A. Wheatcroft, J.A. Hatten, **F.J. Guerrero-Bolaño**. 2013. Loon Lake, Umpqua River Basin: What Tales Do the Sediments Tell? Poster presented at Water Resources Research Symposium sponsored by the Water Resources Graduate Program at Oregon State University, Corvallis, Oregon. (Best Poster Presentation for Water Resources Science) May 13, 2013. (Poster)
- **Guerrero-Bolaño, F.J.**, and J.A. Hatten. 2013. Organic carbon dynamics in fluvial hydrosystems: a network perspective in the face of climate change. 4th Annual Bretz Club Conference & Field Trip April 26-27. Oregon Institute of Marine Biology, Charleston, Oregon. (Poster)
- **Guerrero-Bolaño, F.J.**, and J.A. Hatten. 2013. Organic carbon dynamics in fluvial hydrosystems: a network perspective in the face of climate change. Western Forestry Research Symposium-Canopies to construction: the ecology, management and use of tomorrow's forests. April 22-23. College of Forestry-Oregon State University, Corvallis, Oregon. (Poster)
- **Guerrero-Bolaño, F.J.**, B. B. Zuñiga-Céspedes, G. Rueda-Delgado & N. Obregón-Neira. 2008. Leaf Litter Breakdown in a Neotropical Stream during Rainy Season: An ecohydrological approach. Abstracts 5th Plant Litter Processing in Freshwaters. Coimbra, Portugal. (Oral)
- **Guerrero-Bolaño, F. J.**, & N. Obregón-Neira. 2008. Towards a conceptual model for leaf litter breakdown in neotropical streams using expert systems. Abstracts 5th Plant Litter Processing in Freshwaters. Coimbra, Portugal. (Poster)

*Language of presentation: Spanish*

- **Guerrero-Bolaño, F.J.**, N. Obregón-Neira & A. Torres-Abello. 2012. Procesamiento biológico e hidrodinámico de Carbono Orgánico Particulado en Hidrosistemas Fluviales Tropicales. IX Seminario Colombiano de Limnología, Medellín, Colombia. (Oral)
- **Maldonado-Santafé, C.** & **F. J. Guerrero-Bolaño**. 2012. Indicadores Ecohidrológicos de vulnerabilidad en cuencas hidrográficas ante la construcción de represas. IX Seminario Colombiano de Limnología, Medellín, Colombia. (Oral)
- **Zuñiga-Céspedes, B.**, **F. J. Guerrero-Bolaño** y G. Rueda-Delgado. 2006. Colonización de macroinvertebrados en hojarasca de especies nativas y exóticas en una corriente de montaña neotropical. Resúmenes II Congreso Colombiano de Zoología, noviembre 26 – diciembre 1 de 2006, Santa Marta, Colombia. (Poster)
- **Guerrero-Bolaño, F. J.**, B. Zuñiga-Céspedes, y G. Rueda-Delgado. 2006. Breakdown of exotic and native leaf species in a neotropical mountain stream. Resúmenes VII Seminario de Limnología e I Reunión de Ríos y Humedales Neotropicales. Sep 12-16 de 2006. Ibagué, Colombia. (Oral)

## HIGHER EDUCATION

**Administrative Assistant.** Engineering doctoral program. Pontificia Universidad Javeriana, Bogotá, September 2008-December 2012. Role: Designed, developed and implemented recruiting strategies for a new engineering doctoral program in a leading university in South America, surpassing recruitment expectations by 200%. Kept records of academic progress of 40 doctoral students during the program's first four years. Coordinated both internal and external communications for the doctoral program.

## Teaching

- Fundamentals of Hydrology (Summer 2020), Water Resources Science Graduate Program. Graduate School. Oregon State University.
- Ecohydrology (January-June 2012), Hydrosystems master's program, College of Engineering, Department of Civil Engineering, Pontificia Universidad Javeriana, Bogota, Colombia
- Environmental Fluids Mechanics (July –December 2011), Hydrosystems master's program, College of Engineering, Department of Civil Engineering, Pontificia Universidad Javeriana, Bogota, Colombia
- Ecohydrology (January-June 2011), Hydrosystems master's program, College of Engineering, Department of Civil Engineering, Pontificia Universidad Javeriana, Bogota, Colombia
- Ecology for Engineers (January 2009-December 2010). College of Engineering, Department of Civil Engineering, Colombian Catholic University, Bogota, Colombia
- Chemistry and Water Treatment Plant Design (January-June 2009). College of Engineering, Department of Civil Engineering, Colombian Catholic University, Bogota, Colombia
- Research Methods (July 2009 – June 2010). College of Engineering, Department of Civil Engineering, Colombian Catholic University, Bogota, Colombia
- Life Cycle Analysis (January –December 2010). College of Architecture, Colombian Catholic University, Bogota, Colombia
- Biology and Chemistry Teaching Assistant (July 2004 - December 2005). College of Science, University of Magdalena, Santa Marta, Colombia.

## Undergraduate Research Project Advising

Lilia Carolina Maldonado Santafé. Thesis: Vulnerability indicators of ecohydrological alterations following dam constructions. Pontificia Universidad Javeriana, College of Engineering, Department of Civil Engineering, Bogota, Colombia, (June 2011-May 2012)

## SCIENCE COMMUNICATION

### Science Communication Liaison

- Institution(s): National Center for Ecological Analysis and Synthesis (NCEAS)-University of California Santa Barbara and COMPASS Science Communication. Role: Trained and coached NCEAS research teams and resident scientists on science communication and strategic engagement. Assisted the development of a science-policy program at COMPASS connecting research outcomes from NCEAS with policy solution at regional level in the West Coast (Remote from Corvallis-OR, August 2020 - October 2021)

### Mass media articles

- “¿Vives en el trópico y sufres de asma severa?” CNN Español (July 3<sup>rd</sup>, 2018)
- “Mindfulness y meditación: un experto explica el trasfondo de esta práctica milenaria” CNN Español (July 14<sup>th</sup>, 2018)
- “Los ríos también aumentan el nivel del mar, no sólo el deshielo” CNN Español (July 19<sup>th</sup>, 2018)
- “Una despensa de proporciones selváticas: los milenarios sistemas agroforestales de la amazonia” CNN Español (August 3<sup>rd</sup>, 2018)

### Graphical abstracts via twitter (English)

- “Gut Microbiota Components and Fixed Airway Obstruction” (<https://twitter.com/figuerrero/status/1014342742149918725>)
- “Your Body Under Stress and Meditation: The Science Behind It” (<https://twitter.com/figuerrero/status/1018845673272365057>)
- “River Discharge Also Controls Sea-Level Changes” (<https://twitter.com/figuerrero/status/1020300374882897921>)

- “How Did Amazonian Indigenous Societies Manage Their Forests Sustainably for 4000 Years (Before the Arrival of Europeans)?” (<https://twitter.com/figuerrero/status/1026522360122355714>)
- Besley et al., 2021. American Scientists’ Willingness to Use Different Communication Tactics. Science Communication 43 (<https://twitter.com/figuerrero/status/1389624647923036161>)

## Workshop instructor

- The Message Box-NCEAS-COMPASS. August 2020-October 2021.
- “The Power Beyond the Bullet Point”. Pacific Northwest Water Research Symposium-Resiliency: surviving social and scientific waves, Oregon State University. April 2021
- “The Power Beyond the Bullet Point”. Statewide Technical Training Meeting, Wisconsin Department of Natural Resources, March 2019
- McCall Outdoor Science School (MOSS), Solar Science Program, University of Idaho, Fall 2017
- “**LaRGe**-Making your Presentations **L**ikable, **R**eliable and **G**ettable”. Oregon State University. Spring/Fall 2014-2018

## Science communication presentations

- “Effective Communication for Scientists in a Hurry: A Cheatsheet” National Center for Ecological Analysis and Synthesis-Roundtables, University of California Santa Barbara, March 24<sup>th</sup> 2021 (Virtual)
- “Are knowledge brokers an undiscovered and already endangered species in environmental business ecosystems?” American Water Resources Association-Wisconsin. Wisconsin Dells, WI, March 2020. \*Re-scheduled for Fall, 2020 due to COVID-19
- “Ecosystem Memories”, Nerd Nite-Association for the Sciences of Limnology and Oceanography (ASLO), Honolulu, HI, March 2017
- “Forests Have Memories”, Science Talk Northwest, a conference in science communication, Oregon Museum of Science and Industry, January 2017
- “Reconstructing Watershed History from a Sedimentary Hard-Drive”, Scholar’s Insights, Oregon State University, May 2015
- “Thinning Forests: What Does Not Kill You Makes You Stronger?” Scholar’s Insights, Oregon State University, May 2014

## Science communication & Policy

- “Estimating long-term median total phosphorus concentrations in streams by controlling for seasonal and weather variation” University of Wisconsin-Madison, Water Science Institute | Wisconsin Department of Natural Resources, November 2019

## Radio interviews/Podcast

- “Francisco Guerrero-Bolano: Science Journalism at CNN en Español: A Conversation About The 2018 AAAS Mass Media Fellowship”. Inspiration Dissemination, KBVR, September 2018
- “Deciphering the Language of the Universe”. Inspiration Dissemination, KBVR, October 2015

## Scientific Journalism

- Instituto de Investigaciones Tropicales - INTROPIC, Mar 2004 - Dec 2005, Editorial Committee’s Assistant (Intropica Journal), Santa Marta, Colombia; Universidad del Magdalena, Mar 2004 - Dec 2005, Research Assistant, Santa Marta, Colombia.

## PROFESSIONAL AFFILIATIONS

- 2021-Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
- 2017-Present, American Association for the Advancement of Science (AAAS)

- 2016-Present, Xi Sigma Pi-Zeta Chapter (College of Forestry, Oregon State University)
- 2016-Present, Association for the Sciences of Limnology and Oceanography, Biogeochemistry section (ASLO)
- 2014-Present, American Geophysical Union, Biogeosciences and Hydrology sections (AGU)

## FUNDING THROUGH AWARDS, SCHOLARSHIPS, AND FELLOWSHIPS

● Wisconsin Water Science Policy Fellowship, 2019	\$ 47,600
● OSU-College of Forestry Experiential Education Funding, 2018	\$ 3,000
● AAAS Mass Media Fellowship-Summer Intern at CNN Español, 2018	\$ 5,000
● International Student Scholarship, Oregon State University, 2017-2018	\$ 9,000
● Graduate Student Travel Award, Oregon State University, 2017	\$ 1,500
● Dean's Fund for Excellence and Innovation Fellowship, Oregon State University, 2016	\$ 2,000
● 1 <sup>st</sup> Place, Scholar's Insights, Oregon State University, 2015	\$ 1,000
● Dean's Fund for Excellence and Innovation Fellowship, Oregon State University, 2015	\$ 8,000
● Alfred W. Moltke Memorial Fellowship, Oregon State University, 2014	\$ 6,000
● 1 <sup>st</sup> Place ranking, International Doctoral Scholarship, Government of Colombia, 2013	\$223,200

## SERVICE ACTIVITIES

- Fellowship application reviewer. Reviewed two proposals submitted to the Margaret A. Davidson Graduate Fellowships for the National Estuarine Research Reserve System-NOAA(February 2020-2022)
- Fellowship application reviewer. American Association for the Advancement of Science Mass Media Fellowship. (January 2020-2022)
- Scientific Proposal Reviewer. Reviewed five pre-proposals submitted to the Water Resources Research Act Program and the National Competitive Grant Program with the Department of Interior-USGS Geological Service and the National Institute for Water Resources (April 2019)
- Judge. Capital Science and Engineering Fair. Judging science projects from high-school students mentored by researchers from University of Wisconsin-Madison (Madison, WI, February 16<sup>th</sup>, 2019)
- Fellowship application reviewer. American Association for the Advancement of Science Mass Media Fellowship. (January 2019)
- Creator/Organizer of **LaRGe** science communication model workshops: "Making your presentations **Likable**, **Reliable** and **Gettable**". (Fall 2014, Spring 2015-2018)
- Science Storytelling Instructor. Teaching storytelling techniques to a group of 40 Latino migrant students participating in the MOSS Solar Science Program. (McCall, ID, August 17<sup>th</sup>-21<sup>st</sup>, 2017)
- Performer/Organizer at "Latin Night", a cultural event organized by the Association of Latin American Students (ALAS) at Oregon State University (Corvallis, OR, May 2013, May 2014, May 2017)
- Instar Graduate Mentor. Facilitating networking opportunities for the Instars fellows and to assist the fellows in navigating the Society for Freshwater Science Meeting. (Sacramento, CA, May 21<sup>st</sup>-26<sup>th</sup>, 2016)

## DIVERSITY, EQUITY, INCLUSION, & JUSTICE

- Scientific Event Organizer-Research Network for Ecohydrology and Ecohydraulics (**RedECOHH**). RedECOHH is an Colombian scientific network that aims for the participation of diverse communities from fishermen in rural Colombia to international researches in the co-generation and dissemination of knowledge for better water resources management with emphasis in Colombia and other Latin American countries (2020-Present)
- Mentor for the **Multicultural Program** from the Association for Limnology and Oceanography (ASLO)-ASLOMP. . ASLOMP is a mentoring program aiming to develop cohorts of informed, motivated, experienced, and connected undergraduate and graduate students from under-represented groups (June 2021)
- Training participant-Racial Equity Workshops. **The Equity Paradigm** is a diversity, equity and inclusion firm based in Durham, North Carolina that is dedicated to evolving the ways in which nonprofits and social change organizations understand and approach their work. Attended through COMPASS (January 2021-Present)



- **Diversity, Equity, Inclusion & Justice sub-team member:** Environmental Open Science Institute (EOS). Institution: National Center for Ecological Analysis and Synthesis (NCEAS)-University of California Santa Barbara. Submitted to National Science Foundation (NSF)-(USD\$20,000,000) (February-April-2021)
- Fellowship application reviewer for the **EMERGE** program from Society of Freshwater Science (SFS). EMERGE is a mentoring program sponsored by the National Science Foundation and the Society for Freshwater Science for undergraduate students from under-represented groups interested in freshwater science (January 2021)
- Panel member. **AAAS Mass Media Fellowship Latinx Panel**. Every year the AAAS Mass Media Fellowship has recruited over the years a Spanish-speaking group of fellows. Some of these fellows attended a panel in December 2020 to share their experiences and provide guidance for Latinx applicants for the AAAS Mass Media Fellowship in 2021. (December 2020)
- Trainer-Mentor at **McCall Outdoor Science School (MOSS)**, Solar Science Program, University of Idaho. The purpose of the MOSS Solar Science Program was to engage 34 Latino students from Nampa and Caldwell Public Housing in solar science and storytelling through their experience of the total solar eclipse (August-2017)
- Mentor for the **Instars** program from Society of Freshwater Science (SFS). Instars is a mentoring program sponsored by the National Science Foundation and the Society for Freshwater Science for undergraduate students from under-represented groups interested in freshwater science (May 2017)
- Member of the **Association of Latin American Students (ALAS)** at Oregon State University 2013-2018. ALAS mission is to share the cultural values and expressions of Latin American students with the wider community at Oregon State University