



Panel – Promoting Earth Science Applications to Enhance One Health Partnerships

AmeriGEO Week 2025 | Bogota, Colombia

Wednesday, 13 August 2025 | 10:45am – 12:00pm

Session length: 75 minutes

Session type: Panel

Session format: Hybrid | English-Spanish Interpretation

Session Description:

As global health systems prepare for emerging hazards – whether air pollution, extreme heat, or infectious disease outbreaks – robust partnerships across the Earth and Health sciences are fundamental to integrate data sources, quantify exposure or disease risk, and support public health surveillance and preparedness. Using the One Health concept, this session aims to examine local needs, leverage expertise to integrate satellite- and ground-based data with public health surveillance data, and offer actionable information to mitigate the risk of harmful environmental exposures. Supported by the GEO Health Community of Practice, Inter-American Institute for Global Change Research, Humboldt Institute, the Colombia Ministry of Health and Social Protection, and the Colombia Ministry of Environment and Sustainable Development, this session will highlight specific health priorities in the Americas region and demonstrate how Earth science applications can strengthen public health surveillance and foster robust One Health partnerships. Panelists will describe the need for innovative approaches to enhance data integration and interoperability, which can encourage youth and student engagement and broaden scientific regional networks across the Earth and Health science communities. Panelists will share best practices on how national collaborations have fostered multidisciplinary collaborations in the environmental sciences and supported co-designed solutions with community stakeholders.

Session Objectives:

- Highlight novel and practical applications of Earth observations, in situ data, and other geospatial data sources to informing health decision-making related to air quality management, disaster preparedness and response, ecosystem biodiversity and conservation, and infectious disease prevention and control across the Americas.
- Analyze shared environmental health priorities and challenges, identify opportunities to promote data integration and interoperability, and leverage expertise through multidisciplinary collaborations in the environmental sciences.
- Highlight and promote the GEO Health Community of Practice and the Inter-American Institute for Global Change Research activities, as opportunities to build capacity and expand professional networks in the environmental sciences.

Anticipated Outcomes:

- Better insight of how Earth science data integration and interoperability can help foster multidisciplinary collaboration and advance environmental health goals across the Americas region.
- Shared understanding of regional priorities, needs, and challenges in supporting public health surveillance and preparedness.
- Identification of opportunities for continued contribution and engagement through the GEO Health Community of Practice and Inter-American Institute for Global Change Research activities.

Panelists:

Name		Agency
Dr. Diego Moreno Heredia	Climate Change & Biodiversity Lead	Ministerio de Salud y Protección Social, Colombia
Dr. Mayra Vargas	Veterinarian & Pathologist	Ministerio de Ambiente y Desarrollo Sostenible, Colombia
Mr. Rodrigo González Florian	Climate Change Specialist	Secretaría Distrital de Ambiente de Bogotá, Colombia
Dr. Hugo Mantilla Meluk	Professor & Researcher	Universidad del Quindío, Colombia
Dr. Gina Polo Infante	Professor, Institute of Public Health & Coordinator, Climate Hub	Pontificia Universidad Javeriana, Colombia

Framing Questions:

- How can Earth observations help support national and regional health priorities and inform decision-making activities that can strengthen public health surveillance and foster robust One Health partnerships?
- What are the biggest health priorities and challenges to data integration and operationality across the region, and how can we build sustainable One Health partnerships to advance environmental health goals?
- How can the national and regional organizations strengthen their role in promoting the use of Earth science applications and developing a sustainable framework toward achieving the ambitious environmental health goals?

Session Structure:**Welcome and Opening Remarks (10 minutes)**

The moderator sets the context, describes the session objectives, and introduces the panelists.

Panelist Roundtable (45 minutes)

The moderator facilitates the panel roundtable, where each panelist shares examples that illustrate how their agency is applying Earth observations in support of national and regional environmental health priorities.

Moderated Discussion (15 minutes)

Guided by core framing questions, the moderator facilitates a strategic dialogue with the panelists and the audience.

Closing Reflections (5 minutes)

The moderator shares key takeaways and concluding remarks.