

## **GEO Health Community of Practice**

Tuesday, December 15, 2020  
0830 EST – 1100 EST (GMT-5)

*Virtual connection via WebEx*

### **Brief Description:**

The [GEO Health Community of Practice \(CoP\)](#) and [American Geophysical Union \(AGU\)](#) have partnered to hold the GEO Health CoP virtual meeting on Tuesday, December 15, 2020, as part of the AGU Fall Meeting 2020. As a global network of governments, organizations, and observers, this international platform aims to promote interdisciplinary collaborations that use environmental observations to improve health decision-making at the international, regional, country, and district levels. This meeting will provide an opportunity for members of Earth science and public health communities to describe key international projects and updates, enhance professional networks through [work group activities](#), and discuss priority focus areas that advance GEO and AGU efforts.

### **Agenda:**

#### ❖ **Welcome** (8:30AM – 8:45AM EST/GMT-5)

- Update on AGU/GEO Health CoP Partnership and Participant Introductions (John Haynes, NASA; Juli Trtanj, NOAA; Mark Shimamoto, AGU; Ben Zaitchik, Johns Hopkins University)

#### ❖ **GEO Updates** (8:45AM – 9:00AM EST/GMT-5)

- Update on the GEO Secretariat and GEO Virtual Week 2020 (Steven Ramage, GEO Secretariat Team)

#### ❖ **Invited Presentations** (9:00AM – 10:10AM EST)

- Global Heat Health Information Network (GHHIN) (Joy Shumake-Guillemot, WMO)
- Dengue MOdel forecasting Satellite-based System (D-MOSS) (Gina Tsarouchi, HR Wallingford)
- Predictive Assessment of Transmission Conditions of Cholera in the Environment and Human Population using Earth Observations (Antar Jutla, University of Florida)
- GeoHealth: A Geospatial Surveillance and Response System Resource for Vector Borne Disease in the Americas (Jack Malone, Louisiana State University and A&M College)
- Myanmar Malaria Early Warning System (Tatiana Loboda, U. of Maryland, College Park)
- Environmental Determinants of Enteric Infectious Disease (Ben Zaitchik, Johns Hopkins University)
- Data Opportunities: Building Capacity and Linkages with Data Science Communities (Kathy Fontaine and Thilanka Munasinghe, Rensselaer Polytechnic Institute)

❖ **WMO Workshop and Outcomes** (10:10AM – 10:25AM EST/GMT-5)

- Update on the WMO Workshop, Outcomes Statement, and Next Steps (Ben Zaitchik, Joy Shumake-Guillemot, Neville Sweijd)

❖ **AmeriGEO Update** (10:25AM – 10:35AM EST/GMT-5)

- Update on AmeriGEO activities (Angelica Gutierrez, NOAA)

❖ **Updates from Small Work Groups Leads** (25-minutes) (10:35AM – 11:00AM EST/GMT-5) Predict and Prevent Heat-related Health Risks across Time Scales (Ben Zaitchik, John Hopkins University)

- Predict and Prevent Environmentally-sensitive Infectious Diseases (Antar Jutla, University of Florida)
- Air Quality, Wildfires, Respiratory Health (Tatiana Loboda, U. of Maryland, College Park)
- Food Security and Safety (Dorian Janney, NASA)
- Health Care Infrastructure (John Balbus, NIH/NIEHS; Andreas Skouloudis, iSteep.org and ex-Joint Research Centre)

❖ **Next Steps & Closing** (11:00AM EST/GMT-5)

- Meeting summary and discussion of next steps (John Haynes, NASA; Juli Trtanj, NOAA; Mark Shimamoto, AGU; Ben Zaitchik, Johns Hopkins University)

**In Attendance:** 75 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Laura Judd (NASA Langley), Mark Shimamoto (AGU), Angelica Gutierrez (NOAA), John Balbus (NIEHS), Trisha Castranio (NIEHS), Janet Whaley (NOAA Fisheries/Aquaculture), Steven Rekant (USDA APHIS One Health), Sam Sellers (USAID), Rachael Lewis (Emory U.; CDC One Health Office), Nikki DeLuca (EPA), Jeffrey Luvall (NASA Marshall), Stephanie Schollaert Uz (NASA Goddard), Assaf Anyamba (USRA/NASA Goddard), Cynthia Hall (NASA Earth Science Data Systems), Anna Borovikov (NASA Goddard/GMAO), Kim Locke (NASA Goddard), Brady Helms (NASA Disasters Program), Jennifer Paris (NASA Disasters Program), Sean McCartney (NASA Goddard/SSAI), Dorian Janney (NASA Goddard/GPM mission), Helen Amos (NASA Goddard/SSAI), Leo Goldsmith (USGCRP), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Mike Gremillion (Global Water Security Center, U. of Alabama), Ben Zaitchik (Johns Hopkins U.), Josh Colston (U. of Virginia), Kathy Fontaine (GEO Programme Board; Rensselaer Polytechnic Institute), Thilanka Munasinghe (Rensselaer Polytechnic Institute), Vrishti Jain (Rensselaer Polytechnic Institute), Travis Peterson (Rensselaer Polytechnic Institute), Tatiana Loboda (U. of Maryland, College Park), Amanda Hoffman-Hall (U. of Maryland, College Park), Allison Baer (U. of Maryland, College Park), Varada Shevade (U. of Maryland, College Park), John Malone (Louisiana State U.), Moara Rodgers (Louisiana State U.), Ali Akanda (U. of Rhode Island), Antar Jutla (U. of Florida), Moiz Usmani (U. of Florida), Ashish Sharma (U. of Illinois at Urbana-Champaign), Aaron Naeger (U. of Alabama in Huntsville), Cascade Tuholske (Earth Institute/CIESIN at Columbia U.), Steven Ramage (GEO Secretariat Team), Joy Shumake-Guillemot (WMO), Rifat Hossain (WHO), Juan Castillo (PAHO), Andreas Skouloudis (iSteep.org), Gina Tsarouchi (HR Wallington), Didier

Davignon (Environment and Climate Change Canada), Celine Audette (Environment and Climate Change Canada), Melissa MacDonald (Environment and Climate Change Canada), Javier Salgado (UNITEC, Honduras), Jorge Del Rio Vera (UNOOSA), Ximena Porcasi (CONAE, Argentina), Rachel Lowe (London School of Hygiene & Tropical Medicine), Mona Nasser (U. of Plymouth, UK), Ado Muhammad (Ahmadu Bello U., Nigeria), Olayinka Osuolale (Elizade U., Nigeria), Eduardo Sanchez Universidad Tecnológica Centroamericana, UNITEC, Honduras), Sandra Gómez (Universidad Tecnológica Centroamericana, UNITEC, Honduras), Reyna Durón (Universidad Tecnológica Centroamericana, UNITEC, Honduras), Edwin Herrera-Paz, Jorge Patino, Ligia Diosana Melendez Almendares, Alex He, Alexis Vela Arias, Diana Marcela Fuquene Yate, Dirk Werle, Guy Aube, Jan Ramboer, Karen Bhanot, Gracia Pineda, Jennifer McCarrol, Prixia Nieto, Scott Rayder, Sierra Burrell, Varada Shevade, Guimel Peralta.

### **Some Shared Links:**

- NASA Earth Science Data Systems: [Extreme Heat Data Pathfinder](#)
- NASA Applied Remote Sensing Training Program (ARSET): [Learn to Map the Urban Heat Island Effect with NASA ARSET](#)

### **Some Shared Scientific Publications:**

- Urban Heat Islands. In: Gerald R. North (editor-in-chief), John Pyle and Fuqing Zhang (editors). *Encyclopedia of Atmospheric Sciences*, Volume 1, 2nd ed. (pp. 310–318). (Luvall, Quattrochi, Rickman, Estes Jr, 2015).
- [Evaluating meteorological data from weather stations, and from satellites and global models for a multi-site epidemiological study](#) (Colston, Ahmed, Mahopo et al., 2018) in *Environmental Research*
- [Use of earth observation-derived hydrometeorological variables to model and predict rotavirus infection \(MAL-ED\): a multisite cohort study](#) (Colston, Zaitchik, Kang et al., 2019) in *The Lancet Planetary Health*
- [Pathogen-specific impacts of the 2011–2012 La Niña-associated floods on enteric infections in the MAL-ED Peru cohort: A comparative interrupted time series analysis](#) (Colston, Paredes Olortegui, Zaitchik, et al., 2020) in *International Journal of Environmental Research and Public Health*