

Climate Change & Infectious Disease Threats (Keystone Symposia)

Jun 23–26, 2025 | Herrenhausen Palace, Hannover, Germany

Scientific Organizers: Cecilia Sorensen, Kari C Nadeau, Anna Stewart-Ibarra and Desiree LaBeaud

Tuesday, June 24, 2025

Welcome and Keynote Address

9:00–10:00 AM | Auditorium

*** Cecilia Sorensen**, Columbia University
Session Chair

Maria D. Van Kerkhove, World Health Organization

Emerging Zoonosis and Infectious Threats

10:00–12:15 PM | Auditorium

Desiree LaBeaud, Stanford University

Extreme Weather Events, Warming and Plastic Pollution Impacts of VBD Spread in Kenya

Tom Hughes, Conservation Medicine

Rapid Detection and Capacity Building to Detect Emerging Zoonosis and Infectious Threats

Harald Renz, Philipps University Marburg

Impacts of Climate-Related Exposures on Global VBD Prevalence

Masahiko Haraguchi †, Columbia University

Short Talk: Waterborne Disease Risks During Extreme Events: A Scoping Review

Coffee Break 10:30–10:50 AM | Foyer

Lunch

12:15–1:15 PM | Ballroom

Poster Session 1

12:45–3:00 PM | Ballroom

Symposia Spotlight: Late-breaking research presentations selected from abstract submissions

3:00–4:30 PM | Auditorium

Genaro F Díaz †, FBCB - Universidad Nacional del Litoral

Development and Evaluation of a Rapid Test For the Diagnosis of Bovine Trypanosomosis: an Emerging Tropical Disease in Temperate Regions

Rodrigo de Sá Figueirêdo Meira Teles †, Zarns Medical College

Assessing the Impact of Severe Droughts on the Tuberculosis Care Cascade in the Brazilian Amazon: Evidence from 17 Years of Surveillance Data

Karina Tapinova †, Medical University of Vienna

Predictive Models for Climate-Related Emergency Health Care Utilisation: a Scoping Review

Alex Eapen †, Indian Council of Medical Research

Impact of Climate change on disease transmission potential of Anopheles stephensi, urban malaria vector in India - Challenges for Malaria Elimination

Henok Tadesse Bireda †, Ethiopian Public Health Institute

Dynamics Of Malaria Transmission And Climatic Variables In Dire Dawa Town, East Ethiopia

Fanohinjanaharinirina Rasoamalala †, Institut Pasteur de Madagascar

Climatic Variations and Host-Vector Abundance: A Case Study in Ankazobe District to Understand Plague Epidemiology in Madagascar

Coffee Available 4:30–5:00 PM | Foyer

Modeling Health Risks and Outcomes

5:00–7:00 PM | Auditorium

Mesfin Tessema, Columbia University

Applying Climate Models to Predict and Optimize Adaptation Among Communities - Focus on Forcibly Displaced Populations

Neil M Ferguson, Imperial College London

VIMC (Vaccine Impact Modelling Consortium) Climate Modelling

Aras Kadioglu, University of Liverpool

Modeling and Predicting Impacts of Desertification on Pneumococcal Disease in the Sahel

Halfan Ngowo †, Ifakara Health Institute

Short Talk: Using Bayesian State-Space Models to Understand the Population Dynamics of the Dominant Malaria Vector, Anopheles Funestus in Rural Tanzania

Megan Kowalczyk †, University of Maryland, Baltimore School of Medicine

Short Talk: A Multi-Country Analysis of Vulnerability to Climate-Driven Pathogen Specific Moderate to Severe Diarrheal Disease

Dinner

7:00–8:00 PM | Ballroom

Wednesday, June 25, 2025

Climate Determinants of Public Health Risks

9:00–12:00 PM | Auditorium

Kari C Nadeau, Harvard T.H. Chan School of Public Health

Intersection of Immunology and ID, Multiexposomics, Multiexposure Data

Gordon Dougan, University of Cambridge

Climate Impacts on Vaccinology, Infection and Genomics

Iuri Valerio Graciano Borges †, University of São Paulo

Short Talk: An Ecological Niche Model Approach to Assessing the Environmental Determinants of Dengue Transmission

Santiago Villamil-Chacón †, Universidad de los Andes

Short Talk: Temperature and Competition: Key Drivers in the Ecological Dynamics of Aedes Mosquitoes and Dengue Spread

Brenda Zai †, University of Guelph

Identification of Criteria for the Prioritization of Climate-Sensitive Preharvest Food Safety Risks: an Expert-Informed Approach

Raquel Gardini Sanches Palasio †, USP

Short Talk: Exploring Climate, Environmental, Mobility, and Socioeconomic Factors in Chikungunya Spread Across Brazil

Coffee Break 10:00–10:20 AM | Foyer

Lunch

12:00–1:00 PM | Ballroom

Poster Session 2

12:30–2:30 PM | Ballroom

Perspectives on Personalized Medicine & Patient-Centered Strategies

2:30–3:45 PM | Auditorium

Guido Pisani †, MIT

Climate Change and Lyme Disease: Expanding the Impact on Women's Reproductive Health

Elizabeth Maloney †, Institut Pasteur

Temperature Affects Immune Responses in a Sex-Biased Manner

Mariana Baricco †, CONICET

Socioeconomic Inequality, Poverty, and Climate Change Have Driven the Global Expansion of Dengue Over the Past 50 Years

Matylda Buczkowska †, UCL

Short Talk: Investigating the Links Between Extreme Weather Events, Financial Insecurity, Migration, and Risky Sexual Behaviours in Southern and Eastern Africa

Panel 1: Embedding Policy in your Research Plans to Influence Change in Climate and Health Practice

3:45–5:00 PM | Auditorium

Eloise Todd, Pandemic Action Network

Jan Semenza, UMEA University

Coffee Available

5:00–5:15 PM | Foyer

AI and Data Science -Benefits, Ethical Considerations, Biases - Data that Informs it is not Representative

5:15–6:45 PM | Auditorium

Ángel Muñoz, Barcelona Supercomputing Center

Multimodel Subseasonal Ensembles for Climate Forecasting of Disease Risk

Stella Hartinger Peña, Cayetano Heredia University

Creating Regional Indicators to Track Infectious Disease Outcomes in South America

Roberto C Baldizon †, Silibrain LLC

Short Talk: Leveraging AI for Climate-Sensitive Disease Detection: Enhancing Rapid Testing Through Patient and Environmental Data Correlation

Chloé Morin †, Institut Louis Malardé

Short Talk: BRIGHT Pacific: A Digital Platform to Strengthen Pacific Islands Health Research Collaboration

Data Resources & Sharing Platforms

6:45–7:15 PM | Auditorium

Priyank Hirani, Data.org

Dinner

7:00–8:00 PM | Ballroom

Thursday, June 26, 2025

Early Warning Systems

9:00–12:00 PM | Auditorium

Anna Stewart-Ibarra, Inter-American Institute for Global Change Research and Instituto Interamericano

Science to Implementation of EWSs in Latin America & Caribbean

Assaf Anyamba, University of Maryland Baltimore County

El Niño–Southern Oscillation (ENSO) Teleconnections and Rift Valley fever Early Warning

Avriel Diaz †, Columbia University

Co-Producing a Budget Forecasting System for Vector-Borne Diseases in Panama Using Climate Information

Kulandaisamy A Mary †, Vector Control Research Centre

Short Talk: Dengue Awareness and Source Reduction in Hotspot Area of Lawspet Constituency, Puducherry Union Territory, India

Kamil Erguler †, The Cyprus Institute

Short Talk: Novel Technologies and Ensemble Modelling for Climate-Sensitive Vector Activity and Vector-Borne Disease Risk Assessment

Donnie Mategula †, Malawi-Liverpool-Wellcome Programme

Short Talk: Forecasting Malaria for Elimination: Spatial-Temporal and ARIMA Models for Early Warning in Malawi

Anne E Rittscher-Fogg †, Utrecht University

Short Talk: Innovative Methods of Environmental Monitoring for Early Infectious Disease Detection at the One Health Interface

Coffee Break 10:00–10:20 AM | Foyer

Funding Opportunities Panel Discussion

12:00–1:00 PM | Auditorium

Lunch

1:00–2:00 PM | Ballroom

Career Roundtable

3:30–4:30 PM | Auditorium

Coffee Available 4:30–5:00 PM | Foyer

Mitigation and Health/Economic Co-Benefits

5:00–6:45 PM | Auditorium

Liz Willets †, International Institute for Sustainable Development

Talk Title to be Announced

Martin Edlund, WEF/World Bank

Circular Economic Models to Tackle Climate-Related Infectious Diseases

Breanna B Raymond, Simon Fraser University

Climate Change Impacts on Early-Life Immune System Development

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

6:45–7:00 PM | Auditorium

Dinner

7:00–8:00 PM | Ballroom