





 June 25, 13:00 - 14:30 CEST Hybrid - Room S7 & Online [CONNECT ONLINE](#) Panel

Advances, Perspectives and Limitations for Malaria Epidemiological Surveillance in the Brazilian Amazon

 ENERGY INSECURITY  ENVIRONMENT AND CLIMATE CHANGE
 HEALTH  SUSTAINABLE DEVELOPMENT  TECHNOLOGY

Panel Abstract

Malaria represents one of the main public health issues in the developing world and is still a great challenge to Brazil. Before the 40ies, malaria cases were distributed across the national territory; after the execution of successful campaigns and the almost full elimination of malaria in the extra-Amazonian region in the 50ies to 60ies, the disease started concentrating in the Amazonian region. This region is a natural habitat to over 40 species of anopheles, some of which are potential malaria vectors, and has characteristics that favor the continuous creation of mosquitoes. This region went through successive events of exploration that led to substantial interference in the Amazonian ecosystem, including deforestation, exposing thousands of people to these vectors and consequently to malaria. On this panel, we present current research focused on "Malaria Epidemiological Surveillance" in the Brazilian Amazon, with the goal of better understanding the infection outbreaks and the impact of migration patterns. On this manner, the following papers will discuss: (1) The economic cost of malaria in Brazil; (2) Hydropower dam construction, population mobility and malaria in the Brazilian Amazon; (3) Malaria profiles in high-risk incidence municipalities in the Brazilian Amazon using PCA; (4) Malaria treatment recommendation model using ML and routine surveillance data.

"The economic cost of malaria in Brazil"



Federal University of
Minas Gerais (Brazil)
VIRTUAL



Valeria Silva
Federal University of
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Kenya Noronha
Federal University of
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Bernardo Campolina
Federal University of
Minas Gerais (Brazil)
IN-PERSON

"Hydropower dam's construction, population mobility and malaria in the Brazilian Amazon"



Igor Johansen
Campinas State
University (Brazil)
VIRTUAL



Emilio Moran
Michigan State University
(United States)

"Malaria profiles in high risk incidence municipalities in the Brazilian Amazon using PCA"



Natália Arruda
University of Campinas
(Brazil)
IN-PERSON



Vinicius Maia
Lund University (Sweden)



Luciana Alves
University of Campinas
(Brazil)
VIRTUAL

"Malaria treatment scheme model recommendation using Machine Learning and routine surveillance data"



Carlos Beluzo
Federal Institute of São
Paulo (Brazil)
IN-PERSON



Everton Silva
Federal Institute of São
Paulo (Brazil)
VIRTUAL

Luciana Alves



University of Campinas
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Chair



Álvaro D'Antona
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Discussant



Bianca Carlos
University of Campinas
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