

2nd World Congress on CLIMATE CHANGE AND ENVIRONMENTAL HEALTH

March 25-26, 2022 | Webinar

THE DAMA PROTOCOL – IMPLEMENTING EVOLUTION INTO PUBLIC HEALTH TO PREVENT EPIDEMICS**Orsolya Bajer-Molnár***Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria*

The recent COVID19 pandemic is the latest example of the devastation the ongoing Emerging Infectious Disease (EID) crisis can cause. Despite the numerous advances and existing health security measures, our current approaches are unable to deal with newly emerging infections, as all risk-assessment and preparedness strategies rely on historical data. The DAMA (Document, Assess, Monitor, Act) protocol serves as an umbrella framework for preventing the wave of emerging diseases. It is based on the evolution behind emergence, but integrates activities ranging from the local, boots on the ground contributions of citizen scientists led by ecologists to the most sophisticated technologies of bioinformatics, molecular biology and satellite surveillance. It is able to truly prevent diseases not at the stage of outbreak, but at the stage of crossing to new hosts. Nevertheless, its implementation into our current public health structure requires transdisciplinary collaboration and a conceptual integration into existing disease management strategies. My work involved reviewing historical changes and creating a model to categorize current disease management initiatives by aims and limitations. The model assigns existing organizations and initiatives based on their key outcomes into categories of Palliate and Prepare, and implements guidelines of the DAMA protocol within the third category of Prevent, thereby creating the interconnected Prevent – Prepare – Palliate (3P) model. This conceptual approach clarifies aims of existing structures and offers dynamic solutions to expand activities to prevent novel emergence.

Biography

Dr. Bajer-Molnár completed her PhD in Evolutionary Biology at Eötvös Loránd University, Hungary. She continued her research as a postdoctoral fellow at Dartmouth College (US) and at UFRN (Brazil). As a senior postdoctoral fellow, she is currently interested in implementing evolutionary predictions into public health practices to prevent emergence of novel diseases. She has published 14 papers in peer-reviewed journals, and plays an active role in science communication presenting on events such as TedX, MemoBudapest and the FameLab competition series.