



**AGENDA UPDATE 20. 07. 2022**

## **MOOD hybrid workshop**

**IDENTIFY SIGNS AND DRIVERS OF ZOOONOTIC DISEASES  
EMERGENCE AND DIGITAL DATA RESOURCES FOR EPIDEMIC  
INTELLIGENCE**

Date  
28<sup>th</sup>-29<sup>th</sup> September 2022

Venue: Science Museum MUSE -TRENTO (Italy)

### **Scientific program**

**28<sup>th</sup> September 2022**

**Time 8.30-9.00 am**

Registration

**Time 9.00-9.30**

Welcome and opening speech by Anna Paola Rizzoli (FEM), Elena Arsevska (CIRAD), prof. Mario Pezzotti (FEM), Dr Andrea Simoni (FBK), Dr Michele Lanzinger (MUSE)

**Time 9.30-10.30**

Chair Dr Heidi C. Hauffe

Plenary presentation: Prof. Peter Hudson. The ecology of pathogen invasion and

prevention

**Coffee break 10.30-11.00**

**Time 11.00-12.00**

Chair Dr Heidi C. Hauffe

Plenary presentation: Prof. Marion Koopmans. Tracking and real-time risk assessment of emerging viruses: lessons learned from the COVID-19 pandemic

**Time 12.00-13.00 Lunch break**

**Time 13.00-18.35**

**Session 1: Cross cutting theme: Which drivers and how they affect disease emergence**

**Time 13.00-14.50**

Session 1a: Climate and environment as drivers of infectious disease: the evidence.

Chair Dr William Wint

- 13.00-13.25 Keynote: Dr. William Wint. What climate data are out there and which should you use for modeling
- 13.25-13.50 Keynote: Dr. Donal Bisanzio. What needs to be done to climate drivers to make them model friendly?
- 13.50-14.05 Dr Olivier Restif. Untangling the seasonal drivers of zoonotic spillover from wildlife: Hendra virus dynamics in an Australian bat colony.
- 14.05-14.20 Dr. Eleanor M Rees. Effect of hydrometeorological indicators on leptospirosis risk in Fiji: a modelling study.
- 14.20-14.35 Dr. Francesca Dagostin. Ecological covariates affecting the risk of tick-borne encephalitis in the European continent.
- 14.35-15.50 Dr. Giulia Mencattelli. West Nile virus Lineage 2 overwintering in Italy.

**Time 14.50-15.10 Short break**

**Time 15.10-17.10**

Session 1b: Biodiversity loss, wildlife conservation, host and pathogen traits.

Chair Dr. Valentina Tagliapietra

- 15.10-15.35 Keynote: Prof. Raina Plowright. Cornell University. Pathogens spillover: lesson learned from bat borne viruses.
- 15.35-16.00 Keynote: Dr. Xavier Bailly. Describing the diversity of tick-borne pathogens to understand their transmission routes and manage their emergence.
- 16.00-16.25 Keynote: Dr. Lorenzo Serra. Changes in bird migration pattern in relation to West Nile virus emergence in Europe.
- 16.25-16.40 Dr. Joanne Lello. Macroparasites as drivers of emerging disease.
- 16.40-16.55 Dr. Sarah Perkins. Merging ecology and technology: the capacity for detecting infectious diseases in wildlife using computer vision
- 16.55-17.10 Dr. Benjamin Roche. Prezode: Preventing zoonotic disease emergence

**Coffee break 17.10-17.40**

**Time 17.40-18.30**

Session 1c: Socio-economical drivers of diseases emergence

Chair Dr. Luca Busani

- 17.40-18.05 Keynote. Dr. Stefano Merler. Epidemiology of SARS-Cov-2 and public health indicators
- 18.05-18.30 Keynote. Dr. Anna Ruggieri. Gender and infectious diseases

**Time 20.30-22.00 Social dinner**

## 29<sup>th</sup> September 2022

### **Time 9.00-10.00**

Chair Dr Heidi C. Hauffe

Plenary presentation. Prof. Jan Semenza. Harvesting the potential of big data for vector-borne disease outbreaks

### **Time 10.00-11.00**

Chair Dr Heidi C. Hauffe

Plenary presentation . Prof. Giovanni Rezza. Data sharing and integration in public health

### **Coffee break 11.00-11.30**

**Session 2: Cross cutting theme: What methods and tool can be applied to drivers to provide early warning and rapid disease risk assessment?**

### **Time 11.30-13.00**

Session 2b: Automatic data acquisition via web-scraping

Chair Dr. Maguelonne Teisseire

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| 11.30-11.55 | Keynote. Dr. Mathieu Roche. How text-mining could improve epidemiological surveillance?   |
| 11.55-12.20 | Keynote: Dr. Linda MacKinnon. Innovative Surveillance: ISID's Program for Monitoring Emerging Diseases (ProMED).                                  |
| 12.20-12.35 | Dr. Paolo Tizzani. Contribution of epidemic intelligence to transparency and timeliness in reporting to the World Organisation for Animal Health. |
| 12.35-12.50 | Dr. Andrzej Jarynowski. Social tensions due to ASF and HPAI on Polish Twitter.  |

### **Time. 13.00-14.00 Lunch break**

### **Time 14.00-16.05**

Session 2a: Innovative modelling methodologies that enable risk modelling and

mapping.

Chair Dr. Giorgio Guzzetta and Prof. Roberto Rosà

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| 14.00-14.25 | Keynote. Dr. Vittoria Colizza. Source-sink epidemic dynamics shaping COVID-19 pandemic waves.  |
| 14.25-14.50 | Keynote. Dr. Moriz Kraemer. The context specific emergence and spread of novel SARS-CoV-2 VOCs   |
| 14.50-15.05 | Dr. Giovanni Marini. Drivers of West Nile virus human transmission risk in Europe  |
| 15.05-15.20 | Dr. Carla Ippoliti. EO data and Deep Learning methods to map Culex pipiens distribution in central Italy.  |
| 15.20-15.35 | Dr. Ioannis Kioutsioukis. Early warning of WNV human cases issued from a climate-dependent epidemiological model operating in a probabilistic framework. |
| 15.35-15.50 | Dr. Chiara Poletto. Global spatiotemporal pattern and potential drivers of influenza decline during the COVID-19 pandemic.                               |
| 15.50-16.05 | Dr Chiara Sabbatini. Local vs nationwide restriction against COVID-19 pandemic in France between September 2020 and June 2021.                           |

**Coffee break 16.05-16.30**

**Time 16.30-18.30**

Chair dr. Heidi C.Hauffe

**Time 16.30-17.30**

Plenary presentation. Prof. Emily Gurley. Spillover Surveillance and One Health Response: Understanding Emerging Zoonotic Threats in Real Time.

**Time 17.30-18.30**

Plenary presentation. Prof. Hector Aguilar- Carreno. Broad-spectrum countermeasures in response to early spillover events.