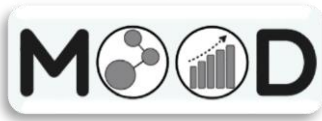


*This meeting is part of the project MOOD. This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 874850*



## MOOD hybrid workshop

### IDENTIFY SIGNS AND DRIVERS OF ZONOTIC 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 Dr.ssa Annapaola Rizzoli (FEM), Dr.ssa Elena Arsevaska (CIRAD), Prof. Mario Pezzotti (FEM), Dr. Michele Lanzinger (MUSE), Dr Stefano Merler (FBK), Dr.ssa Valentina Perrotta (PAT), Dr. Giancarlo Ruscitti (PAT), Dr. Francesco Pizzo (APSS).

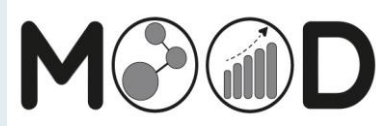
**Time 9.30-10.30**

Chair Dr.ssa Heidi C. Hauffe

Plenary presentation: Prof. Peter Hudson. Science and pre-emergent prevention

**Time 10.30-11.00**

Coffee break



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**Time 11.00-12-00**

Chair Dr.ssa Heidi C. Hauffe

Plenary presentation (on-line): 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 13.00-14.50**

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

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.ssa Eleanor M Rees. Effect of hydrometeorological indicators on leptospirosis risk in Fiji: a modelling study.
- 14.20-14.35 Dr.ssa Francesca Dagostin. Does high habitat diversity reduce the risk of TBE in Europe?
- 14.35-15.50 Dr.ssa Giulia Mencattelli. West Nile virus Lineage 2 overwintering in Italy.

**Time 14.50-15.10**

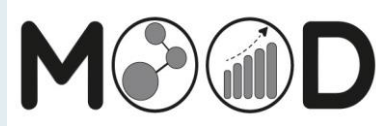
**Short break**

**Time 15.10-17.25**

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

Chair Dr.ssa 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.



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- 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.ssa Joanne Lello. Macroparasites as drivers of emerging disease.
- 16.40-16.55 Dr.ssa 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
- 17.10-17.25 Dr. Nicola Ferrari. Epidemiological intelligence for surveillance of animal health: monitoring mass mortality events in wildlife

**Time 17.25-17.50**

**Coffee break**

**Time 17.50-18.40**

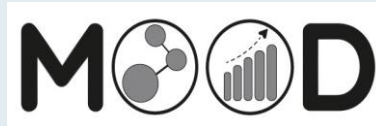
Session 1c: Socio-economical drivers of diseases emergence

Chair Dr. Luca Busani

- 17.50-18.15 Keynote. Dr. Stefano Merler. Epidemiology of SARS-Cov-2 and public health indicators
- 18.15-18.40 Keynote. Dr.ssa Anna Ruggieri. Gender and infectious diseases

**Time 19.00-21.00**

**Aperi-dinner at MUSE starting from 19.00 pm**



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

**Time 9.00-10.00**

Chair Dr.ssa 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.ssa Heidi C. Hauffe

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

**Time 11.00-11.30**

**Coffee break**

**Time 11.30-13.00**

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

Session 2a: Automatic data acquisition via web-scraping

Chair Dr.ssa Maguelonne Teisseire

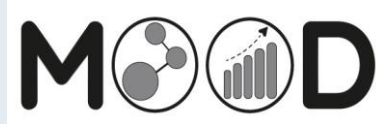
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|-------------|---|
| 11.30-11.55 | Keynote. Dr. Mathieu Roche. How text-mining could improve epidemiological surveillance?   |
| 11.55-12.20 | Keynote: Dr.ssa Linda MacKinnon (on-line). Innovative Surveillance: ISID's Program for Monitoring Emerging 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 2b: Innovative modelling methodologies that enable risk modelling and mapping.



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Chair Dr. Giorgio Guzzetta and Prof. Roberto Rosà

- 14.00-14.25 Keynote. Dr.ssa 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.ssa Carla Ippoliti. EO data and Deep Learning methods to map Culex pipiens distribution in central Italy.
- 15.20-15.35 Dr. Ioannis Kioutsoukis. Early warning of WNV human cases issued from a climate-dependent epidemiological model operating in a probabilistic framework.
- 15.35-15.50 Dr.ssa Chiara Poletto. Global spatiotemporal pattern and potential drivers of influenza decline during the COVID-19 pandemic.
- 15.50-16.05 Dr.ssa Chiara Sabbatini. Local vs nationwide restriction against COVID-19 pandemic in France between September 2020 and June 2021.

**Time 16.05-16.30**

**Coffee break**

**Time 16.30-17.30**

Chair Dr.ssa Heidi C.Hauffe

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

**Time 17.30**

Closing of the meeting