



Paradigm shifts for
Global One Health
International symposium
23-25 April 2024 in Wageningen

Programme

wur.eu/GOH2024



08.00 Conference registration

08.45 – 09.00 Opening address by Ernst van den Ende – General Director Animal Sciences Group WUR

09.00 – 10.30 [Controlling and eliminating zoonotic diseases](#)

Keynote: “Embracing Global One Health Against Emerging Zoonoses.”

- 09.00 • A spatial kernel model for risk mapping and source detection of airborne disease
- 09.30 • Uncovering mechanisms behind the spatial-temporal emergence of Usutu virus in the Netherlands in a multi-host context
- 09.40 • Challenging presumptions of guilt: shifting the paradigm on the role of animals in zoonotic disease dynamics in complex emergencies
- 09.50 • A quantitative microbial risk assessment for Toxoplasma gondii infections in The Netherlands and Europe
- 10.00 • Understanding and predicting the spread of Phlebotomine sand flies in Europe
- 10.10 • ERRAZE zoonotic framework - intervention & simulation model for disease outbreaks in the Netherlands involving wildlife, livestock and vectors
- 10.20

chair: Natalie Vinkeles Melchers (WUR)
Wim van der Poel (WUR)
 Dante Spekken (RIVM)
 Mariken De Wit (WUR)
 Dorien Braam (London School of Hygiene and Tropical Medicine)
 Arno Swart (RIVM)
 Danyang Wang (WUR)
 Boris Schmid (WUR)

10.30 – 11.00 Coffee break

11.00 – 12.30 [Making One Health happen: designing suitable legal, governance and policy frameworks](#)

Keynote: “Why is legislation relevant to One Health? The work of the FAO Development Law Service.”

- 11.00 • TBA
- 11.40 • Operationalizing Global One Health – a tool for the screening of proposals based on One Health criteria
- 11.50 • Coping with complexity: a comparative study of Oak Processionary Moth adaptation the Netherlands, England, and Flanders
- 12.00 • Multi-sectoral approaches for AMR governance: Stakeholder interviews in the Netherlands on policy, practice and research from a One Health perspective
- 12.10 • One Health preparedness and response for mosquito-borne viruses: a stakeholder- and social network-analysis in the Netherlands
- 12.20

chair: Harro Maat (WUR)
Carmen Bullón (FAO)
 Merel Langelaar (UU)
 Annabelle Daburon (WUR)
 Yvette Buist (WUR)
 C. Schneeberger (Nivel)
 Pauline De Best (Erasmus MC)

12.30 – 13.30 Lunch break



Day 1 (part 2) | 23 April WICC Wageningen

<p>13.30 – 15.00 13.30 14.10 14.20 14.30 14.40 14.50</p>	<p><u>Curbing the silent AMR pandemic</u> Keynote: “Different suggestions for improving Global One Health surveillance of AMR.”</p> <ul style="list-style-type: none"> • Ionophore coccidiostats: risk of co-selection of antimicrobial resistance • Colistin resistance in feces from livestock in the Netherlands • One Health MRSA surveillance: the Dutch experience • Prevalence of Colistin-Resistant Escherichia coli in Humans and Poultry in Indonesia • Various Mobile Genetic Elements Involved in the Dissemination of the Phenicol-Oxazolidinone resistance Gene optrA in the Zoonotic Pathogen Streptococcus suis: a Nonignorable Risk to Public Health 	<p>chair: Mike Brouwer (WUR) Frank Aarestrup (DTU) Marielle Pikkemaat (WUR) Esther Meijer (WUR) Cindy Dierikx (RIVM) Soe Yu Naing (Utrecht University) Liping Wang (Nanjing Agricultural University)</p>
<p>15.00 – 15.30</p>	<p>Tea break</p>	
<p>15.30 – 16.30 15.30 15.40 15.50 16.20</p>	<p>Global One Health work – 10 minute highlights by the event organisers and sponsors ERRAZE@WUR and WUR RIVM - ZOOVER GOH-RP (Massey University New Zealand, University of California – Davis USA, University of Nanjing China, WUR NL) European One Health Association (EOHA, formerly MedVetNet Association) and the One Health EJP</p>	<p>chair: Joukje Siebenga (WUR) Joukje Siebenga Joke van der Giessen Renata de Lara Muylaert, Richard Van Vleck Pereira, Yingjuan Qian Ludovice Sepe</p>
<p>16.30 – 17.30 16.30 16.45</p>	<p>Panel: Improving One Health collaborations in Europe and beyond Introductions: <ul style="list-style-type: none"> • STAR-IDAZ IRC & GloPID-R: Coordinating One Health research funding globally <ul style="list-style-type: none"> • Introducing One Health cross-agency task force With contributions from the following panellists:</p>	<p>moderator: Maarten Hoek (RIVM) Madeline Newman (STAR-IDAZ) & Hans-Eckhardt Hagen (GloPID-R) Stef Bronzwaer (EFSA) Hans-Eckhardt Hagen (GloPID-R), Madeline Newman (STAR-IDAZ) Stef Bronzwaer (EFSA), Carmen Bullón (FAO), and Hein Imberechts (Sciensano)</p>
<p>17.30 – 18.30</p>	<p>Posters and drinks</p>	
<p>19.00</p>	<p>Conference dinner for participants who have registered for dinner (location: WICC, Conference venue)</p>	



08.00	Conference registration	
09.00 – 10.30	<u>Early detection and characterisation of new emerging pathogens</u>	chair: Wim van der Poel (WUR)
09.00	Keynote: "Early and late alarms: Detecting potential emerging viral threats in clinical and field samples."	Olli Vapalahti (University of Helsinki)
09.40	• Shotgun metagenomics for the detection of foodborne zoonotic pathogens	Kees van der Ark (RIVM)
09.50	• Early detection and characterization: fieldable sequencing detected a novel mpox clade 1 virus causing an outbreak in Kamituga, DRC	Bas Oude Munnink (Erasmus MC)
10.00	• Development of novel diagnostics for monitoring and surveillance of zoonotic diseases using mosquitoes for xenosurveillance	Carlijn Balvers (WUR)
10.10	• Designing surveillance systems for early detection of highly pathogenic avian influenza in wild birds to reduce the risk of incursion into poultry farms	Beshir Ali (WUR)
10.20	• Human infections with Eurasian Avian-like swine influenza virus A(H1N1) in The Netherlands coincidentally detected in routine respiratory surveillance systems	Dirk Eggink (RIVM)
10.30	• Experimental models for characterization of emerging vector-borne viruses	Barry Rockx (WUR, Erasmus MC)
10.40 – 11.10	Coffee break	
11.10 – 12.40	<u>Striking the right balance: healthy environments, resilient and productive agrifood systems</u>	chair: Marion Kluivers Poedt (WUR)
11.10	Keynote: One Health: the biodiversity-agriculture nexus	Andrew Cunningham (The Zoological Society of London)
11.50	• Contributions of livestock production animals to ambient ammonia and particulate matter in a livestock dense area	Ceder Raben (UU)
12.00	• Risk for high-pathogenicity avian influenza virus infection in commercial poultry farms at the micro landscape scale, The Netherlands, 2014-2022	Jose Gonzales (WUR)
12.10	• Enhancing zoonotic disease prevention: Using behavioural insights to look at compliance in farmers	Juliette Fraser (WUR)
12.20	• Integration of farmers' and experts' knowledge in livestock disease management in Kisumu County, Kenya	Jackline Owili (WUR)
12.30	• Assessing the Urban Wildmeat Value Chain in Lagos, Nigeria	Samuel Akpan (WUR)
12.40 – 13.30	Lunch break	



Day 2 (part 2) | 24 April WICC Wageningen

13.30 – 15.00 From One Health signalling, surveillance to response

13.30 **Keynote: "Pandemic prevention and pandemic preparedness, what is in the name."**

- 14.15 • The Role of Poultry Feed in a Major Salmonella Outbreak Linked to Eggs
- 14.25 • In the Congo Basin, South Kivu, DR Congo, the implementation of a One Health approach through the establishment of a community-based epidemiosurveillance network combining actors from the three health sectors
- 14.35 • One Health innovative sampling to understand the ecology and spread of Usutu virus and West Nile virus in the Netherlands, 2016-2022
- 14.45 • One Health approach on coronaviruses - investigating virus diversity in reservoir and sentinel animals
- 14.55 • Monitoring of asymptomatic persons exposed to highly pathogenic avian influenza virus in the Netherlands
- 15.05 • The relationships between urban green space and the abundance of rats and their zoonotic pathogens

chair: Eelco Franz (RIVM)

Joke van der Giessen (RIVM)

Oda van den Berg (RIVM)
Joep van Mierlo (Vétérinaires Sans Frontières Belgium)
Bas Oude Munnink - *for*
Reina Sikkema (Erasmus MC)
Milena Samojlovic (Lund University)
Frederika Dijkstra (RIVM)
Miriam Maas (RIVM)

15.15 – 15.45 Tea break

15.45 – 16.45 **Panel: Future One Health needs for prevention and preparedness**

Introduction: "Pandemic preparedness from an international perspective."

With contributions from the following panellists:

moderator: Maarten Hoek (RIVM)

Corien Swaan (RIVM)

Corien Swaan (RIVM)
Andrew Cunningham (The Zoological Society of London)
Marion Koopmans (Erasmus MC)
Olli Vapalahti (University of Helsinki)

16.45 – 18.00 Day wrap up
Poster award ceremony
Posters and drinks



Day 3 (part 1) | 25 April Omnia, Wageningen Campus

08.30	Conference registration at Omnia, Wageningen Campus	
09.00 – 11.00	PhD presentations – 10 minutes	Chair to be announced
09.10	• Quantifying Antimicrobial Use on medium-scale broiler farms in West-Java, Indonesia	Rianna Anwar Sani (UU)
09.20	• Identification of a novel immune suppression target for MD vaccine development	Chenyi Bao (Nanjing Agricultural University)
09.30	• Reduction and Genetic Variability of Campylobacter in Free-Range Broilers Using Feed and Water Additives in a Production Setting	Cristina Calvo-Fernandez (Technical University of Denmark)
09.40	• A critical role for host-derived cystathionine- β -synthase in Staphylococcus aureus-induced udder infection	Shaodong Fu (Nanjing Agricultural University)
09.50	• Mapping the highly pathogenic avian influenza landscape using mathematical models for cell culture dynamics	Luca Bordes (WUR)
10.00	• Fast scalable diagnostics for the detection of avian influenza	Marleen Voorhuijzen (WUR)
10.10	• A species-independent lateral flow microarray immunoassay to detect WNV and USUV NS1-specific antibodies in serum	Bijan Godarzi (WUR)
10.20	• Association between antimicrobial usage and resistance in livestock and antimicrobial resistance among human Salmonella, Campylobacter and E. coli infections	Linda Ernestina Chanamé Pinedo (RIVM)
10.30 – 10.45	Coffee break	
10.45 – 11.30	Panel: Opportunities and obstacles on the OH expert's career path	moderator: Joukje Siebenga (WUR)
11.30-12.30	PhD presentations – 10 minutes	Chair: Luca Bordes
11.30	• Publication Trends, Research, and Policy Needs Regarding the One Health Approach and Vector-Borne Diseases (VBDs): A Systematic Review.	Anne van der Maarel (WUR)
11.40	• Long-read shotgun metagenomics as a One Health tool in support of the quality control of pharmaceutical products	Andres Posadas (Sciensano, Belgium)
11.50	• A pan-orthohantavirus preclinical human lung xenograft mouse model	Danny Noack (Erasmus Medical Center)
12.00	• Pathogen monitoring in Konik horses in a nature reserve in the Netherlands	Inês Marcelino (WUR)
12.10	• Drivers of infection with Toxoplasma gondii genotype type II in Eurasian red squirrels (Sciurus vulgaris)	Sara Wijburg (RIVM)
12.20	• Factors associated with zoonotic literacy across socio-demographic groups	Frits Vlaanderen (RIVM)
12.30 – 13.10	Lunch break	



Day 3 (part 2) | 25 April Omnia, Wageningen Campus

13.10 – 13.50 PhD presentations – 10 minutes

13.10	• Antimicrobial use in Dutch pig farms: risk factors and associated diseases	Panagiotis Mallioris (UU)
13.20	• A comparative analysis of the dendritic cell response upon exposure to different rabies virus strains	
13.30	• Lateral genetic transfer driving co-evolutionary interactions of phages of probable industrial importance and their hosts across the Escherichia, Listeria, Salmonella, Campylobacter, and Staphylococcus Domains	Keshia Kroh (Erasmus Medical Center) Saba Kobakhidze (Iv. Javakishvili Tbilisi State University)
13.40	• Prevalence and Characterization of Extended-Spectrum β -Lactamase-Producing Enterobacteriaceae in Dogs Admitted to a Veterinary Hospital in Vienna	Pia Saria (University of Veterinary Medicine Vienna)

13.50 – 14.00 *Switching rooms*

Workshop 1. One Health Collaborations
Get out of your head and into the process.
 by the Centre for Unusual Collaborations
 More information – next page

Workshop 2. One Health Collaborations
What makes or breaks an interdisciplinary project?
 by Knowledge, Technology and Innovation of WUR
 More information – next page

15.30 – 15.45 Tea break

15.45 – 17.15 **Workshop 3. Using visualisation in One Health research.**
How to make your results accessible to a wide audience.
 More information – next pages

Hybrid session 4. Global One Health networking.
Connect beyond the meeting and share opportunities.
 More information – next pages

17.15 – 18.30 Closing remarks followed by drinks



How to establish a good and productive One Health collaboration?

One Health collaborations often entail working with people who have different training backgrounds, and who use different jargon. It might also be difficult to define a shared approach to the workplan. We may have different methods, or different approaches to designing a study. That way, we may end up working in parallel, rather than together. Finally, even though working towards “health for all species” may seem straightforward, we may have different perspectives on specific project goals. In fact..., are we sure we share the same goals for the project? And what value systems do we each use? Complex inter- and transdisciplinary collaborations require a specific set of skills and attention to the process on top of the content.

We *all* know about these challenges, yet we are often lost in translation, and fail to get productive co-creation off the ground. To help One Health researchers come to good collaborations, we offer 2 parallel and distinct approaches to this challenge.



Workshop 1 One Health Collaborations Workshop Option 1: Get out of your head and into the process

[The Centre for Unusual Collaborations](#) (CUCo - part of the EWUU Alliance) provides training to help establish complex collaborations. In this workshop Sylvia Brugman and Meghann Ormond offer us a sneak peek into some of the training methods used by CUCo to get out of our head and into the process. During this interactive and active workshop we learn to facilitate creating a safe space in a fun way. Not only useful in the setting we'll be in during the GOH symposium, but you can use this approach in future collaborations, too. The insights will help you understand the challenges you may have in collaborations or team work.



Workshop 2 One Health Collaborations Workshop Option 2: What makes or breaks an interdisciplinary project?

An important premise for interdisciplinary work is to understand how science works. What is a discipline? How have they emerged and changed over time? What is interdisciplinarity, and why is it important? Are there differences between natural-technical sciences and social science? In this workshop Cees Leeuwis and Harro Maat from the [Knowledge, Technology & Innovation](#) (KTI) group address these fundamental questions to help you reflect on your own discipline, and how this creates barriers as well as opportunities for interdisciplinary collaboration. We will also discuss strategies that may be used to create conducive conditions for interdisciplinary work.



3. Using visualisation in One Health research

After having created actionable results in your complex One Health project, how can you achieve optimal impact from your hard work? This workshop will provide you with tools to communicate complex research findings in visualisations to a diverse audience. The techniques that you will learn during this workshop can be useful not only to you, but also to a wide variety of the end-users of your work.

Good visual representation will make it easier for end-users (e.g., citizens, policymakers, researchers, NGOs) to understand and implement your research recommendations. This workshop therefore contributes to knowledge transition and ensures that your research findings will be translated into policy and practice.

4. Global One Health networking session – Connect for a Healthy Planet

Moderated by Dr Annabelle Daburon (Wageningen Centre for Innovation Development), Ms. Jackline Owili and Ms. Michou Weimar (Wageningen University)

Immerse yourself in a dynamic and hybrid experience to finish the Global One Health symposium with. This side-event will help expand the network of Global One Health practitioners, to people beyond those who are in Wageningen. The session will offer a platform for emerging professionals in the field of Global One Health to showcase their work, connect beyond institutional boundaries, and engage in thought-provoking debates. This side event will be presented in hybrid format. This gives us the opportunity to unite various communities, such as PhD candidates connected to the European One Health Association (EOHA, formerly the Med-Vet-Net Association), World Food Forum Transformative Research Challenge prize winners and GOH short course alumni.

The session comprises two integral components.

- A networking and profiling opportunity that utilises an online mapping tool will allow participants to present their current One Health projects through video, PowerPoint, or written documents. The map will require some preparatory work by participants, and will be viewable before the side event. It will serve as a dynamic platform for interaction, comments, and discussions.
- An interactive online session will explore ideas in One Health, encouraging participants to share viewpoints, learn about the latest developments, and identify resources and opportunities for funding and training. Facilitated through Zoom, the session will be interactive and engaging, by mentimeter quizzes and the promotion of the WFF Transformative Research Challenge and other relevant opportunities. Don't miss this chance to be part of an enriching exchange that will leave you inspired and better connected within the vibrant landscape of Global One Health, beyond Europe.