



RESIDENTS' WORKSHOP

Workshop on antimicrobial resistance: state of the art and perspectives

Who, when, where?

Who: selected ECVPH residents

Where: online meeting, virtual time zone: CET

When: from 14th to 15th March 2023

Aim?

Antimicrobials – including antibiotics, antivirals, antifungals and antiparasitics – are medicines used to prevent and treat infections in humans, animals and plants. The massive and uncontrolled use of antimicrobials led to the emergence of resistant organisms. According to the WHO organisation, antimicrobial resistance is a global health issue, as it makes infections harder to treat and increases the risk of disease spread, severe illness and death.

This workshop aims to provide knowledge on the current situation regarding bacterial and parasitic antimicrobial resistance and a critical overview on efficient solutions to the multifaceted global challenges to fight against it. To do so, the workshop will be a combination of theoretical training and practical applications taught by different expert lecturers on this subject (notably diplomates of 3 different European colleges with EBVS® Specialists in both Parasitology, Pharmacology and Toxicology and in Veterinary Public Health, a team leader at the Pasteur institute, and at ANSES, and OIE representatives). The first day will focus on the current status of the antimicrobial resistance situation, with conferences presenting the worldwide current situation and a first workshop session aiming, through 4 examples, participants to analyse, using a corpus of scientific articles, the causal elements underlying the emergence of antimicrobial resistance. The second day will provide perspectives to slow down the emergence of antimicrobial resistance, and will start with a second workshop session in the morning which will allow participants putting themselves in the shoes of actors (farmer, veterinarian, health authority or doctor) to strategies that can be set up at each of these levels to limit the emergence or spreading of antimicrobial resistance. The workshop will end with conferences on alternative strategies to the use of common antibiotics in the afternoon. All the participants will be encouraged to bring their own competences, perspectives and curiosity and to listen and learn from others' perspectives.

Program?

Day 1: State of the art regarding antimicrobial resistance

- 9h - 9h30: Presentation of the participants and organisers
- 9h45 - 10h45: Global situation of antimicrobials resistance from WOAHP perspective - OIE / Ana LUISA PEREIRA MATEUS

- 11h – 11h45: Antimicrobial resistance: a One Health issue? – ANSES / Jean-Yves MADEC
- 11h45 – 12h30: Resistance to insecticides: challenges in human and animals' health – ENVT / Emilie BOUSHIRA and Emmanuel LIENARD

Lunch break

- 13h30 – 14h: Instructions for the workshop 1

PAPERS WILL BE SENT IN ADVANCE TO PARTICIPANTS AND MUST BE READ BEFORE THE WORKSHOP

- 14h - 16h: **Workshop 1: How can we explain the emergence of resistance ?**

4 sessions:

- Antibio-resistance of *Salmonella* spp: Origin and impact for the poultry sector?
- Multi-drug-resistant *Staphylococcus aureus*: origin and consequences for human and animal health?
- Insecticide resistance and management of human and animal vector borne diseases
- Diffusion of resistant bacteria in the environment: causes and consequences

- 16h - 18h: Restitutions

- 18h: End of the day

Day 2: How to slow down the development of antimicrobial resistance?

- 9h - 9h30: Instructions for the workshop 2

• 9h30 - 11h: **Workshop 2: What concrete actions can you take to limit the occurrence and/or selection of resistant bacteria and parasites as:**

- Farmer?
- Veterinary surgeon?
- Doctor?
- Health authority?

- 11h15 - 12h15: Restitutions part 1/2

Lunch break

- 13h15 - 14h15: Restitutions part 2/2

- 14h30 - 15h15: Prudent use of antibiotics – ENVT / Alain BOUSQUET-MELOU

- 15h15 - 16h: The come-back of phage therapy: why and how – Institut Pasteur / Laurent DEBARBIEUX

- 16h : End of the day

Elements of the ECVPH Curriculum covered with this workshop?

Core program:

I. B4: Scientific communication and leadership

- I. C2: Science-based policy making
- I. C1: Ethics in VPH: good scientific practices, role for VPH specialist in society
- I. C6: surveillance and monitoring?

FS sub-specialty program:

- II. A4: Antimicrobial resistance
- II. D2: environmental Hygiene

PM sub-specialty program:

- II. B3: Science-based policy making

Organisers and speakers?

- Jean-Denis BAILLY – ENVT, France
- Emilie BOUSHIRA – ENVT, France
- Alain BOUSQUET-MELOU – ENVT, France
- Hubert BRUGERE – ENVT, France
- Laure DAVID – ENVT, France
- Laurent DEBARBIEUX – Institut Pasteur, Paris, France
- Pedro IMAZAKI – ENVT, France
- Emmanuel LIENARD – ENVT, France
- Ana LUISA PEREIRA MATEUS – WOA, France
- Jean-Yves MADEC – Anses (National Agency for Food, Environmental and Occupational Health Safety), Lyon, France

How to postulate?

Each candidate must submit a *curriculum vitae* of one page to jean-denis.bailly@envt.fr. The **selected persons should be ECVPH resident** (either in the PM or FS subspecialty). The final group of candidates must have a good gender balance, and regional representation is also a criterion. A selection committee consisting of workshop organizers will choose candidates considering the aforementioned criteria. The virtual workshop is free of charge and can accept max. **25 participants**. **The last date to register is** the 23th February 2023. Applicants are informed of acceptance the 1st March 2023.

For more information about the topics, registration, deadlines, etc. please contact: jean-denis.bailly@envt.fr