SURVEILLANCE — DAY 10			
Time	**Activity Description**	**Intended Learning Outcomes** *After completion, trainees will (be able to):*	**Relevance** *Why this is important for you as:*
0930-1100	Background on the biology of *Listeria* (Marc Lecuit)	Gain knowledge on the biology of *Listeria*, its molecular mechanisms of infection, virulence factors, resistance mechanisms, prevalence patterns, geographical distribution, and evolutionary history Understand the context of *Listeria* research and surveillance.	**Bioinformaticians and epidemiologists** will gain foundational knowledge on the biology of this bacteria, and will learn how to interpret genomic and epidemiological data within a One Health framework. **Microbiologists** will deepen their knowledge about the One Health framework to study *Listeria* and to increase their knowledge about their ecological niches and transmission dynamics
1110-1240	Case study on Listeria (Mathieu Tourdjman)	Understand how to conduct a case-control study for a foodborne outbreak, including questionnaire usage and food traceback techniques Learn to establish clear and consistent case definitions for surveillance and outbreak investigations Know how to analyze epidemiological surveillance data related to Listeria infections Acquire knowledge of integrating genomic and epidemiological approaches to enhance Listeria infection surveillance and prevention efforts	**Bioinformaticians, Microbiologists and Epidemiologists** will be able to conduct case-control studies and analyze epidemiological surveillance data specific to Listeria infections.

Details

Listeria

This lecture on *Listeria* provides participants with in-depth insights into various aspects of *Listeria* biology, genomics, epidemiology, and public health significance. Participants will explore the cellular mechanisms, infection processes, prevalence patterns, geographical distribution, virulence variation among clonal populations, and evolutionary history of *Listeria*. This course enhances participants' understanding of *Listeria* biology and

epidemiology, enabling them to apply this knowledge to research, surveillance, and control efforts aimed at preventing *Listeria* contamination and foodborne disease outbreaks.

Case study Listeria

This case study on *Listeria* will cover case-control studies and analyzis of epidemiological surveillance data specific to *Listeria* infections. Participants will learn to establish clear case definitions, use questionnaire usage and food traceback techniques, and analyze surveillance data. Additionally, they will acquire knowledge of integrating genomic and epidemiological approaches to enhance *Listeria* infection surveillance and prevention efforts.