

ERFAN DIALOGUE

*Listeria
monocytogenes deep
typing: from the wet to
the dry-lab activities*

ERFAN Food Hygiene Working Group

ERFAN DIALOGUE

Listeria monocytogenes deep typing: from the wet to the dry-lab activities.



TIMETABLE

Central European Time (CET)

METHODOLOGY

The online ERFAN Dialogues days will be organized via Zoom platform

WORKING LANGUAGE

English with simultaneous translation in French

PRESENTATION

OBJECTIVES

PARTICIPANTS

PROGRAMME

TRAINERS-FACILITATORS

CONTACTS

AGENDA

PRESENTATION

The Globalization of food trade, changing consumption habits towards highly processed foods and demographic changes, with increase of susceptible populations, have increased risk of foodborne illnesses. To date, whole genome sequencing (WGS) provides the highest possible subtyping resolution improving the surveillance, outbreak investigation and source-attribution of foodborne pathogens as *Listeria monocytogenes*. Moreover, high-risk pathogenic *L. monocytogenes* strains can be also identified based on the presence of phenotypic properties, such as virulence potential, but also persistence or growth/survival under stress conditions using comparative genomics studies.

OBJECTIVE

The aim of this training is to increase the knowledge, skills and competences required to work with *L. monocytogenes*. The course will be structured in order to be used as a guide and introduction to an updated wet and dry-lab activities in the public contest.

PARTICIPANTS

The African participants come from National Veterinary Laboratories and Veterinary schools of Northern and Southern Africa, together with the IZSAM experts of the OIE collaborating centre for Food Hygiene

AGENDA

CHAIRMAN *Francesco Pomilio*
IZSAM, Italy

Wednesday, 23 February 2022		
TIME	TOPIC	TRAINER
10.00 – 10.05	Opening and welcome	<i>Francesco Pomilio</i> Listeria expert , IZSAM, Italy
10.05 – 10.20	Overview of NLR for <i>Listeria monocytogenes</i> activities	<i>Marina Torresi</i> IZSAM, Italy
10.20 – 10.45	<i>L. monocytogenes</i> : extraction principles	<i>Marina Torresi</i> IZSAM, Italy
10.45 – 11.00	BREAK	
11.00 – 12.00	Principles of NGS technologies	<i>Alexandra Chiaverini</i> IZSAM, Italy
12.00 – 12.30	WGS data analysis: main concepts	<i>Alexandra Chiaverini</i> IZSAM, Italy

Wednesday, 2 March 2022		
TIME	TOPIC	TRAINER
10.00 – 10.10	<i>L. monocytogenes</i> data on GENPAT	<i>Alexandra Chiaverini</i> IZSAM, Italy
10.10 – 10.45	Quality Check	<i>Alexandra Chiaverini</i> IZSAM, Italy
10.45 – 11.00	BREAK	
11.00 – 12.30	MLST and cgMLST clustering SNP analysis	<i>Marina Torresi</i> IZSAM, Italy

Wednesday, 9 March 2022		
TIME	TOPIC	TRAINER
10.00 – 10.45	Genomic features: virulence, persistence and AMR determinants Pangenome	<i>Alexandra Chiaverini</i> IZSAM, Italy
10.45 – 11.00	BREAK	
11.00 – 12.30	Validation workflow: wet & dry lab	<i>Marina Torresi</i> IZSAM, Italy

TRAINERS-FACILITATORS

NAME	E-MAIL	INSTITUTION	COUNTRY
Alexandra Chiaverini	a.chiaverini@izs.it	IZSAM	Italy
Francesco Pomilio	f.pomilio@izs.it	IZSAM	Italy
Marina Torresi	m.torresi@izs.it	IZSAM	Italy

SCIENTIFIC COORDINATORS



Alexandra Chiavarini

Food technology and animal feed Hygiene Department.
Collaborating Centre for Food Hygiene, *IZSAM, Teramo, Italy*
Tel.: +39 0861 332465
Email: a.chiavarini@izs.it



Francesco Pomilio

Head of the Unit – Food technology and animal feed Hygiene Department.
Collaborating Centre for Food Hygiene, *IZSAM, Teramo, Italy*
Tel.: +39 0861 332462
Email: f.pomilio@izs.it



Marina Torresi

Food technology and animal feed Hygiene Department.
Collaborating Centre for Food Hygiene, *IZSAM, Teramo, Italy*
Tel.: +39 0861 332465
Email: m.torresi@izs.it

Chiara Sensoli
ERFAN Secretariat
Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale"
Teramo – Italy
Tel.: +39 0861 332406
Email: c.sensoli@izs.it

