

Open training opportunity 1:

Course Title: SARS-CoV-2 whole genome sequencing and basic bioinformatics	
Format	In-person course
Dates/duration	03 – 07 March 2025
Location	Laboratoire National De Santé, Dudelange, Luxembourg
Description	Five-day twinning visit on SARS-CoV-2 whole genome sequencing and bioinformatics
Objectives/intended learning outcomes	<p>By the end of this course, the learner will be able to:</p> <p>Apply the WGS workflow from sample to sequence and methods for variant determination.</p> <p>Analyse and visualise for example variant proportions over time from own data and using online resources such as Nextstrain and others to assess global data.</p> <p>Operate the reporting of results to ECDC TESSy databases and to public databases such as GISAID or the COVID-19 data portal.</p> <p>Explain the purpose and limitations of the Illumina and Nanopore techniques.</p> <p>This twinning visit offers the trainee the possibility to discover two different techniques (Illumina and Nanopore) used in the Microbiology department of the trainer in the national genomic surveillance with the downstream data analysis and reporting. The training will be tailored to the trainer and the trainee's needs.</p>
Target audience	This course is designed for laboratory staff with prior knowledge and experience of standard laboratory techniques such as PCR, Sanger sequencing, and understanding of NGS technologies. The training is for one participant who should have sufficient knowledge on relevant laboratory methods to gain the greatest benefit from this training and be able to cascade the training at their institute. The training is considered advanced to expert level.
Eligibility Criteria	<p>The applicants should be or will be involved in the microbiological surveillance of SARS-CoV-2 and be able to actively apply skills acquired as part of the training.</p> <p>The applicants should be part of the ECDC ERLI-Net and/or ECOVID-LabNet or a national public health institute or associated institute in countries of the EU/EEA, the Western Balkan (Albania, Kosovo, Montenegro, Serbia, North Macedonia, Bosnia and Herzegovina) or Türkiye.</p>

Open training opportunity 2:

Course Title: Focused training on influenza surveillance laboratory methods and reporting	
Format	In-person course
Dates/duration	2 days. Dates can be agreed on with the training institute but should be before 15 March 2025.
Location	Hellenic Pasteur Institute, Athens, Greece
Description	Two-day twinning visit on focused training influenza surveillance laboratory methods and reporting
Objectives/intended learning outcomes	<p>The exact training content will be agreed with the training participant.</p> <p>By the end of this course, the learner will be able to: Describe and apply laboratory methods used in the microbiological surveillance of influenza. Depending on training needs, content will cover one of the below areas with a focus on trainees' needs:</p> <ol style="list-style-type: none"> 1. Molecular assays <ul style="list-style-type: none"> - multiplex respiratory real-time PCR implementation - detection and typing - subtype/lineage determination for seasonal influenza and zoonotic (avian/swine) strains from human specimens - validation of molecular assays 2. Genetic and Phenotypic Antiviral resistance <ul style="list-style-type: none"> - genetic antiviral resistance determination - phenotypic antiviral resistance testing 3. Neutralization and Antigenic characterization assays <ul style="list-style-type: none"> - virus microneutralization assay - antigenic characterisation 4. Bioinformatics Analysis <ul style="list-style-type: none"> - Basic bioinformatic analysis of influenza virus / use of bioinformatics tools - clade assignment for seasonal influenza and zoonotic (avian/swine) strains - genetic antiviral resistance determination - phylogenetic analyses - reporting of results to public databases such as GISAID <p>Operate the reporting of results to ECDC TESSy databases.</p> <p>This twinning visit aims to provide a focused training on certain aspects of Influenza surveillance laboratory methods and reporting. The training will be tailored to the trainee's needs.</p>
Target audience	The training is for one participant who should have sufficient knowledge on relevant laboratory methods to gain the greatest benefit from this training and be able to cascade the training at their institute. The training is considered advanced to expert level.
Eligibility Criteria	The applicants should be or will be involved in the microbiological surveillance of Influenza and be able to actively apply skills acquired as part of the training. The applicants should be part of the ECDC ERLI-Net and/or ECOVID-LabNet or a national public health institute or associated institute in countries of the EU/EEA, the Western Balkan (Albania, Kosovo, Montenegro, Serbia, North Macedonia, Bosnia and Herzegovina) or Türkiye.