

**Program for a 4-days training at the EURL-VTEC, Istituto Superiore di Sanità, Rome,
on the identification and characterization of the different groups
of pathogenic *E. coli* by Real Time PCR amplification of their virulence genes**

Day 1 (14:30-17:30)

- Overview of the activities and procedures in place at the EURL.
- Opening discussion on the work-plan and overview of the activities to be done during the stage.
- Preparation of the cultures of test and control strains.

Day 2 (9:30-17:30)

- Preparation of DNA samples for Real Time PCR from test and control strains.
- Real Time PCR for the identification of the *E. coli* pathogroups STEC and EAEC.

Day 3 (9:30-17:30)

- Real Time PCR for the identification of the *E. coli* pathogroups EIEC and ETEC.
- DNA template preparation for the identification of *stx* gene subtypes by conventional PCR.
- *stx*-subtyping by conventional PCR (EU-RL VTEC_Method_006_Rev 1).

Day 4 (9:30-17:30)

- Agarose gel electrophoresis to visualise the *stx*-subtyping PCR results.
- Analysis of the results obtained.
- General discussion on the activities carried out.
- Questionnaire on the trainee satisfaction toward the stage

All the three days include explanatory discussions driven by the EURL-VTEC experts and practical sessions carried out by the trainee with an hands-on approach, under the supervision of the EURL-VTEC staff.