

# I ADVANCED TRAINING SCHOOL ON: **RatHEV DIAGNOSTICS, SEROLOGY, SEQUENCING AND GENOMIC INTERPRETATION**



## PROGRAMME

### DAY 1

#### SEROLOGY, CONFIRMATORY ASSAYS AND ANTIBODY DETERMINATION

**09:00–09:20.** Welcome, course objectives and host introduction.

**09:20–10:00.** ratHEV as an emerging zoonotic hepatitis agent: why diagnostic preparedness matters now.

**10:00–10:45.** Serological approaches in ratHEV: current formats, performance and limitations

**10:45–11:05.** Coffee break

**11:05–11:35.** ELISA, confirmatory assays and antibody determination: practical framework for the Training School

**11:35–12:00.** Confirmatory serology in ratHEV: dot blot, Western blot and bead-based perspectives

**12:00–13:00.** Interactive discussion and practical briefing.

**13:00–14:30.** Lunch break

**14:30–18:00.** Practical session 1 – Serology and confirmatory approaches

### DAY 2

#### MOLECULAR DIAGNOSIS, qPCR AND SANGER SEQUENCING INTERPRETATION

**09:00–09:40.** Molecular diagnosis of ratHEV: why a single assay is not enough.

**09:40–10:15.** Sample types, extraction considerations, controls and analytical pitfalls.

**10:15–10:35.** Coffee break

**10:35–11:00.** Animal surveillance perspective and strain diversity in rodent populations.

**11:00–11:30.** From positive qPCR to sequence: Genotype/subtype assignment and interpretation of ORF1 sequence data.

**11:30–12:00.** Clinical relevance of ratHEV: acute/chronic infection, extrahepatic manifestations and interpretation of molecular findings.

**12:00–13:30.** Practical session 2A – qPCR workflow set-up and first interpretation steps

**13:30–14:30.** Lunch break

**14:30–18:00.** Practical session 2B – Ct interpretation and Sanger-based sequence analysis

### DAY 3

#### NGS DATASET ANALYSIS AND INTERPRETATION

**09:00–10:00.** Introduction into NGS techniques for whole genome sequencing of ratHEV.

**10:00–13:00.** Computational practical session – Live demonstration and interpretation of ratHEV NGS datasets.

**13:00–13:45.** Integrated discussion session – interpretation boundaries, unresolved issues and future diagnostic needs.

**13:45–14:00.** Final wrap-up and official close of the Training School.



# ONWARD

[hev-onward.eu](http://hev-onward.eu)



Funded by  
the European Union  
COST-CA24140

