

The rise of the **EURL for Public Health on Helminths and Protozoa (EURL-PH-HP)**



Adriano Casulli



Part 1 (recap):

EURL-Parasites



European Union Reference Laboratories

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Animal Health

Food and Feed

Plant Health

Further information

The legislation concerning the designation and tasks of the European Union Reference Laboratories and the European Union Reference Centres is [Regulation \(EU\) No 2017/625](#) starting 29 April 2018.

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Animal Health

Food and Feed

Plant Health

Further information

Food and Feed

Reference Laboratory for	Organisation	Links
Additives for use in animal nutrition	JRC Joint Research Centre	• EURL • NRLs
Animal proteins in feedingstuffs	CRA-W Centre wallon de Recherches agronomiques	• EURL
Antimicrobial resistance	DTU Danmarks Tekniske Universitet	• EURL
Campylobacter	SVA Statens veterinärmedicinska anstalt	• EURL • NRLs
Coagulase positive Staphylococci (including S. aureus)	ANSES Agence nationale de sécurité sanitaire de l'alimentation, de l'environnement et du travail	• EURL • NRLs

26 different EURLs in the field of **Food and Feed**

Istituto Superiore di Sanità

– [NRLs](#)

of 15 March 2017

on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation)



Article 94

Responsibilities and tasks of European Union reference laboratories

Article 100

Designation of national reference laboratories

COMMISSION REGULATION (EC) No 776/2006

of 23 May 2006

amending Annex VII to Regulation (EC) No 882/2004 of the European Parliament and of the Council as regards Community reference laboratories

9. Community reference laboratory for parasites (in particular *Trichinella*, *Echinococcus* and *Anisakis*)

Istituto Superiore di Sanità (ISS)
I-00161 Roma
Italy



**European Union Reference Laboratory
for Parasites** (EURL-P; food safety)



Single Market Programme (SMP Food)



Our Targets, our Staff

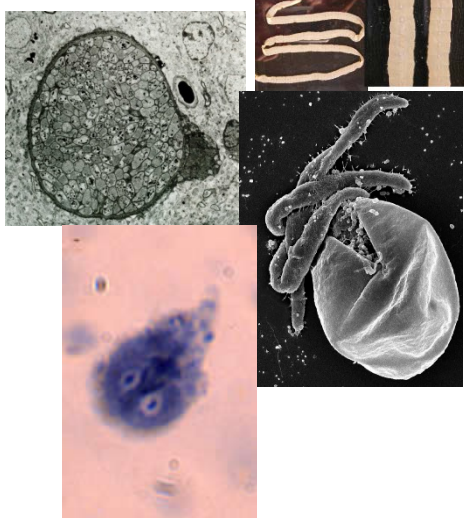
Helminths

- Trichinella
- Echinococcus
- Anisakis
- Opisthorchis
- Taenia
- Ascaris
- Toxocara

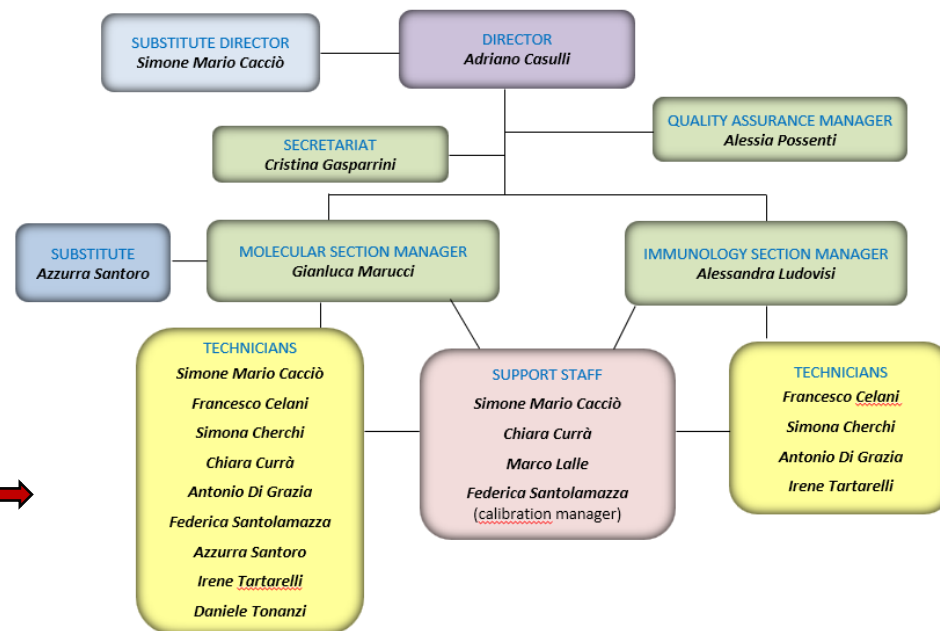


Protozoa

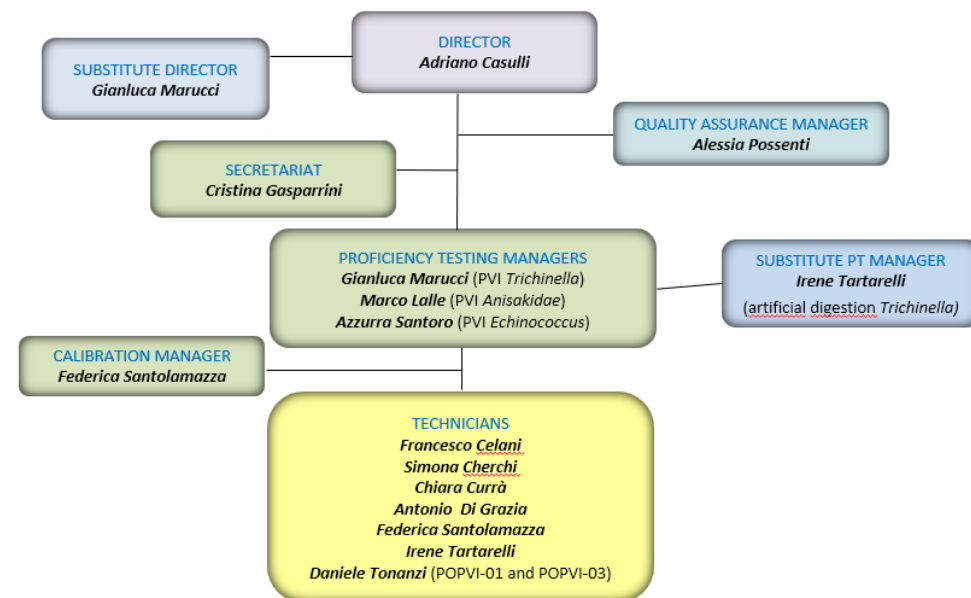
- Toxoplasma
- Cryptosporidium
- Giardia
- Entamoeba
- Blastocystis
- Sarcosystis



ISO/IEC 17025
Laboratory testing



ISO/IEC 17043
Proficiency Testing provider



The Network of the Reference Laboratories for Parasites

ISO 17025



EURL-P

27 Member States

NRLs
National Reference Labs

Local level

Official Labs

involved in controls of food and feed or animal diseases



Part 2 (news):

EURL for Public Health on Helminths and protozoa



Implementation of the



- [Regulation \(EU\) 2022/2371 on Serious Cross-Border Threats to Health](#) (Art. 15):
Legal mandate for EC to set up **European Union Reference Laboratories for Public Health (EURL-PH)**
- The network of **EURLs** is operated and coordinated by the 
- EURLs-PH responsible for coordinating national laboratories in the following areas:
 1. [Reference diagnostics](#)
 2. [Reference material resources](#)
 3. [External quality assessments](#)
 4. [Collaboration and research](#)
 5. [Scientific advice and technical assistance](#)
 6. [Monitoring, alert notifications and support in outbreak response](#)
 7. [Training](#)



EURLs for public health (EURL-PH)

DESIGNATED &
OPERATIONAL

- AMR in bacteria
- Diphtheria and pertussis
- Emerging, rodent-borne and zoonotic viral pathogens
- High-risk, emerging and zoonotic bacterial pathogens
- *Legionella*
- Vector-borne viral pathogens

2023/24
EU4H €21.7 M
7 years

DESIGNATED

- Food- and water-borne bacteria
- Food-, water- and vector-borne helminths and protozoa
- Food- and water-borne viruses

2024/25
EU4H €20.5 M
7 years

CALL
LAUNCHED
(and recently
designated)

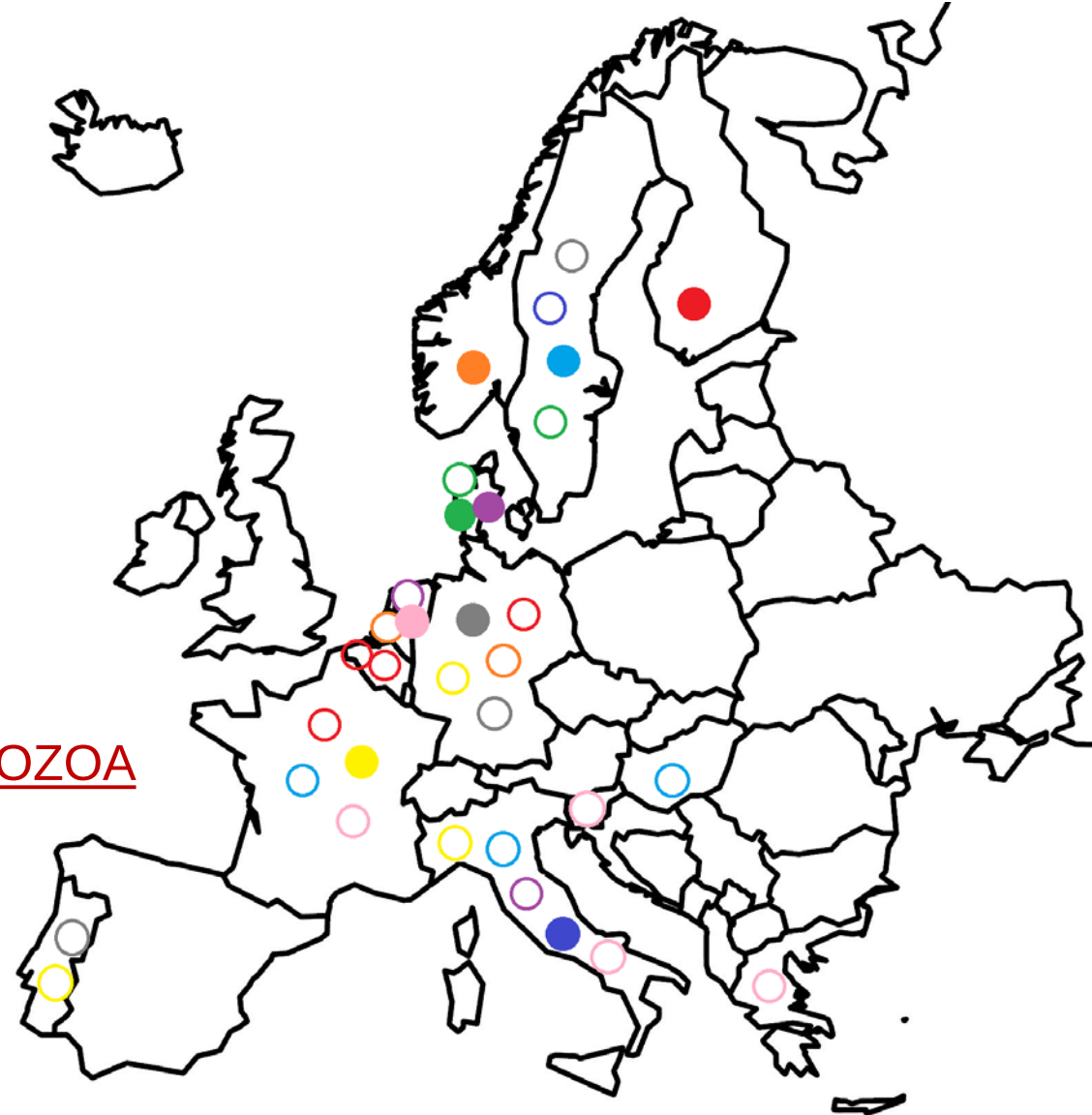
- **Respiratory viruses**

2025/26

State of play: EURL designation

9 EURLs have been DESIGNATED to date:

-  Antimicrobial resistance (AMR) in bacteria
-  Diphtheria and pertussis
-  Emerging, rodent-borne and zoonotic viral pathogens
-  Food- and water-borne bacteria
-  Food- and water-borne viruses
-  Food-, water- and vector-borne HELMINTHS and PROTOZOA
-  High-risk, emerging and zoonotic bacterial pathogens
-  *Legionella*
-  Vector-borne viral pathogens



EURL for Public Health on Food-, Water-, and Vector-borne **HELMINTHS and PROTOZOA (EURL-PH-HP)**

DESIGNATION:

[Commission Implementing Regulation \(EU\) 2024/2959.](#)

ANNEX II

The EU reference laboratory for public health on food-, water- and vector-borne helminths and protozoa, its responsibilities and tasks

1. The consortium designated as the EU reference laboratory for public health on food-, water- and vector-borne helminths and protozoa (hereinafter 'EURL'):

Consortium led by:

Istituto Superiore di Sanità, Viale Regina Elena 299, 00161, Roma RM, ITALY:

Also composed of:

Folkhälsomyndigheten, Nobels väg 18, SE-171 82 Solna, SWEDEN.



EURL-PH-HP



DEPARTMENT
INFECTIOUS DISEASES

ISS
(Coordinator)

PHAS
(Partner)



Folkhälsomyndigheten
PUBLIC HEALTH AGENCY OF SWEDEN

➤ Department of Microbiology

- Unit of Foodborne and Neglected Parasitic Diseases (PAN)
- Unit of Vector-borne Diseases (MTV)

Adriano Casulli

ISO/IEC 17025 - Laboratory testing
ISO/IEC 17043 - Proficiency Testing Provider



**European Union Reference Laboratory
for Parasites** (EURL-P; food safety)



WHO Collaborating Centre
for Cystic and Alveolar Echinococcosis
(*One Health*)



WOAH Reference Laboratory
for Trichinellosis

National Reference
Laboratory for
Trichinella



- Unit for Parasitology

Caroline Rönnberg

ISO 15189 - Medical laboratory

National Reference Laboratory for parasitology

slim

Swedish Laboratory
Network for Microbiology





MANDATE (2026-2032):

Sustain **ECDC** laboratory members of the disease networks:

European Food- and Waterborne Diseases and Zoonoses Network (FWD-Net)

European Emerging and Vector-borne Diseases Network (EVD-Net)

WP1:

COORDINATION and COMMUNICATION (ISS)

- T1.1** Management
 - T1.2** Coordination
 - T1.3** Communication and Dissemination
 - T1.4** Preparation and Monitoring of workplans and project reports
-

WP2:

LABORATORY ACTIVITIES & TECHNICAL/SCIENTIFIC ADVICE (ISS)

- T2.1** Reference diagnostics, characterization services and test protocols
 - T2.2** Reference material
 - T2.3** EQA schemes
 - T2.4** Collaborative research
 - T2.5** Scientific advice and technical support to Networks
 - T2.6** Scientific advice to ECDC/EU
 - T2.7** Outbreak responses
-

WP3:

ANNUAL MEETINGS and TRAININGS (PHAS)

- T3.1** Organisation of annual meetings
- T3.2** Organisation wet-lab trainings

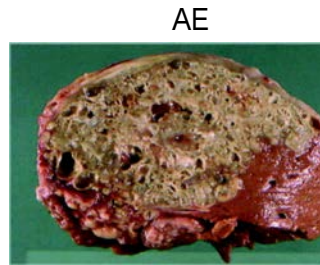
PROVISION of:

- **Reference material**
- **Reference diagnostics**
- **Characterisation services**
- **EQA schemes**
- **Technical/scientific support** (to ECDC, EC, network lab members)
- Organize **annual meetings** and **trainings** for ECDC laboratory disease networks

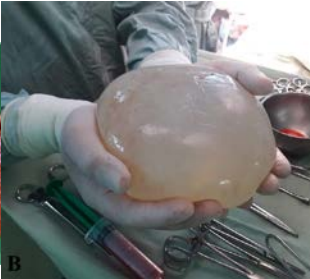
(2026-2032)

4 eukaryotic pathogens, 5 diseases:

AE

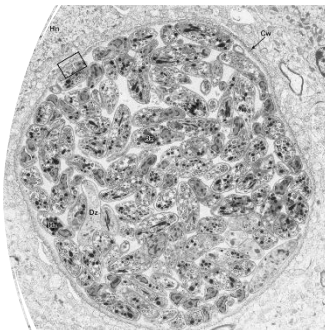
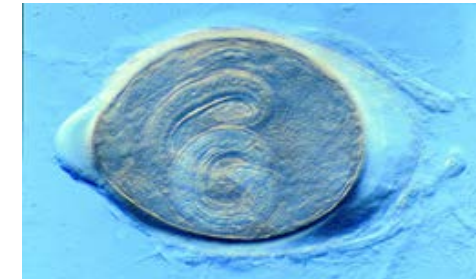


CE



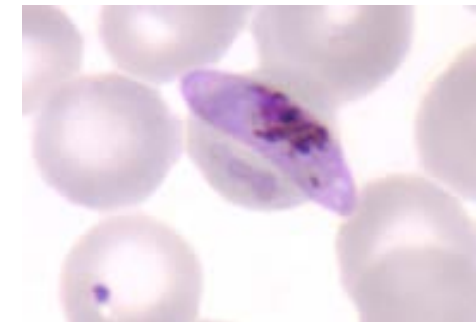
- *Echinococcus*
(cestodes)

- *Trichinella*
(nematodes)



- *Toxoplasma*
(protozoa)

- *Plasmodium*
(protozoa)



...and **other helminths and protozoa** (*Leishmania*, *Taenia*, *Opisthorchis*, *Schistosoma*, etc.) of EU public health relevance...

TIMING



Designation: Nov 2024
([*Commission Implementing Regulation \(EU\) 2024/2959*](#))

GAP: Now

GA signature: expected by December 2025

Inception of the project: 01/01/2026



- *Echinococcus*
(cestodes)

- *Trichinella*
(nematodes)



- *Toxoplasma*
(protozoa)

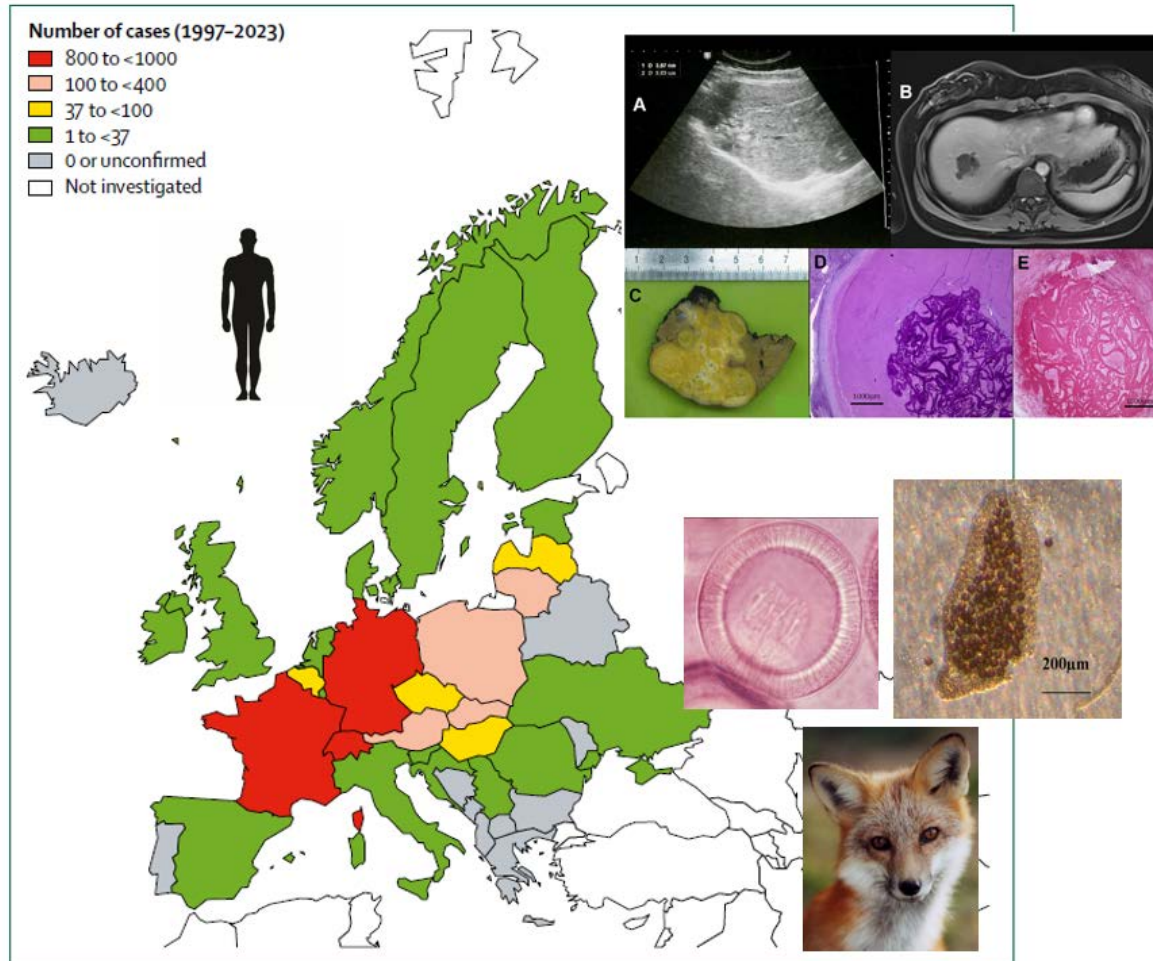
- *Plasmodium*
(protozoa)

LAY THE FOUNDATIONS
of the



THE LANCET Infectious Diseases

ONLINE FIST: June 25, 2025



Unveiling the incidences and trends of alveolar echinococcosis in Europe: a systematic review from the KNOW-PATH project

Adriano Casulli, Bernadette Abela, Daniele Petrone, Barbara Šoba, Balázs Dezsényi, Jacek Karamon, Laurence Millon, Urmas Saarma, Daniela Antolová, François Chappuis, Severin Gloor, Marcel Stoeckle, Beat Müllhaupt, Relja Beck, Heimo Lagler, Felix Lötsch, Herbert Auer, Marie-Pierre Hayette, Libuše Kolářová, Sniedze Laivacuma, Mindaugas Šarkūnas, Vitalijus Sokolovas, Audronė Marcinkutė, Karin Troell, Ansgar Deibel, Pikka Jokelainen, Małgorzata Sulima, Dagny Krankowska, Stillhard Roman, Gaëtan-Romain Joliat, Nermin Halkic, Solange Bresson-Hadni, Joanna Halina Bednarek, Andrzej Załęski, Małgorzata Paul, Sheraz Yaqub, Mogens Jensenius, Joke van der Giessen, Laura Nabarro, Peter Chiodini, Florent Demonmerot, Jenny Knapp, Beate Grüner, Peter Kern, Lynn Peters, Federica Santolamazza*, Azzurra Santoro*

A new **BINARY STAR-SYSTEM** is emerging in Europe:
Two EURLs on PARASITES in a **One Health** perspective



"Thanks for Listening"



WHO Collaborating Centre: Epidemiology,
Detection and Control of Cystic and
Alveolar Echinococcosis (*One Health*)



European Union Reference Laboratory
for Parasites (EURL-P; food safety)



EURL
PUBLIC HEALTH
FOOD-, WATER- AND VECTOR-BORNE
HELMINTHS AND PROTOZOA