



**University of Zurich**<sup>UZH</sup>

**u<sup>b</sup>**

**UNIVERSITÄT  
BERN**



**Institutes of Parasitology**

**European Veterinary Parasitology College (EVPC)**

## VIPs @ Vetsuisse

**Very Important Parasites in Zurich and Berne –  
from fundamental to applied research**



1<sup>st</sup> – 7<sup>th</sup> June 2025

Continuing Education in Veterinary Parasitology for EVPC Diplomates and Residents

**Gold sponsor**



**Boehringer  
Ingelheim**

Silver sponsor



Bronze sponsor

**IDEXX**

## General Information

### Course Organizers:

Manuela Schnyder, Hubertus Hertzberg, Andreas Oehm, Walter Basso, Caroline Frey

Manuela Schnyder

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**Venue:** Institute of Parasitology (IPZ), Vetsuisse Faculty, University of Zurich, Winterthurerstrasse 266a, 8057-Zurich, Switzerland.



## How to arrive:

Travelling by plane:

Zurich Airport (Zürich Flughafen) is located at 7 km from the venue, which can be reached by tram in about 30 min or taxi in about 15 min.

Travelling by tram from Zurich Airport: Take tram 10 (direction Zürich HB) until tram station “Milchbuck” (14 stops), and from there tram 7 (direction Stettbach) or tram 9 (direction Hirzenbach) to tram stop “Tierspital” (next stop).

Travelling by train:

Zurich main train station (Zurich HB, Hauptbahnhof) can be reached from abroad with connections from all over Europe. It is located at 4 km from the venue, which can be reached by tram or by taxi in about 15 min.

Travelling by tram from Zurich main train station: Take tram 7 (direction Stettbach) at tram stop “Bahnhofstrasse/HB” until tram stop “Tierspital” (11 stops).

Travelling by car

Zurich may be reached by car using existing major highways (National road tax), ensuring the shortest possible journey times. In the city or on the Campus parking is, however, severely limited and expensive; so you are encouraged to use public transportation.

Public transportation in Zurich

[https://www.stadt-zuerich.ch/content/vbz/en/index/tickets/fare\\_zone\\_system.html](https://www.stadt-zuerich.ch/content/vbz/en/index/tickets/fare_zone_system.html)



City of Zurich

**No participation fee** is asked.

In the course are included: **all lunches and coffee breaks as outlined in the program**; field excursion; teaching and laboratory materials.

Not included in the course are: travel to and from Zurich, accommodation, breakfast, and public transport tickets in Zurich.

**Language:** The official language will be English

**Number of participants:** maximum 12

**Participants selection:** Priority: 1. EVPC Residents, 2. EVPC Diplomates, 3. Other interested candidates.

**List of lecturers and assistants** (in order of appearance):

Manuela Schnyder, Prof, Dr med vet, Dipl EVPC (MS)

Andreas W. Oehm, Dr. med. vet. (AOE)

Peter Deplazes, Prof, Dr med vet, Dipl EVPC (PD)

Deborah Bohner, med. vet. (DB)

Gillian Muchaamba, Dr. med. vet., cand. PhD (GM)

Hubertus Hertzberg, PD Dr med vet, Dipl EVPC (HH)

Kannan Venugopal, Dr, PhD (KV)

Chandra Ramakrishnan, Dr, PhD (CR)

Niels Verhulst, Prof, Dr, PhD (NV)

Walter Basso, Prof, Dr. med. vet., Dipl EVPC (WB), Institute of Parasitology, University of Bern

Caroline Frey, Prof. Dr. med. vet., Dipl EVPC (CF), Institute of Parasitology, University of Bern

Britta Lundström-Stadelmann, Prof. Dr. (BLS), Institute of Parasitology, University of Bern

Natalie Wiedemar, PhD Dr. med. vet. (NW), Institute of Parasitology, University of Bern

Gastón Moré, PhD, Dr. med. vet., EVPC Resident

Alec Hochstrasser, cand. PhD (AH)

Mitchell Bourne, Dr PhD (MB)

Allan Okwaro, Dr. PhD (AO)

Felix Grimm, Dr, PhD (FG)

Assistance: Francesca Gori, lab technician

Assistance. Janine Hauri, lab technician

Assistance: João Crisostomo, EVPC Resident, cand. PhD med. vet.

## Program

### Sunday 1<sup>st</sup> June

To be defined: City tour (optional); Meeting point: main station (below the Niki de Saint Phalle “Ange protecteur”)



**Welcome Dinner (organised):** Meeting point 18:30, “Milchbuck” tram stop (tram no. 7, 14, 9, 10).

### Monday 2<sup>nd</sup> June

**08:00 Meeting point: in front of the Institute of Parasitology**

**8:15-9:30:** Lecture (MS, AOE): *Introduction to carnivore parasites*

Contents: General aspects of carnivore parasites including epidemiology, hosts, clinics, diagnostics, research at IPZ

**9:30-10:00: Coffee break**

**10:00 - 12:00:** Lecture and practical activity (MS, AOE)

***Introduction into fox dissection with a parasitological focus and diagnostics***

Contents:

Methodological procedures for fox dissections including hygiene measures; microscopical exercises on intestinal and cardiopulmonary parasites of carnivores

**12:00-13:00:** Lunch at Mensa of Veterinary Faculty

**13:00-16:00:** Practical activity (AOE, MS, FG, JC, PD, DB):

Contents: Necropsy of foxes; recovery of parasites from fox intestine; (filtration-concentration method) and other organs; microscopy

**16:00-16:30: Coffee break**

**16:30-18:30: Lecture and practical activity (MS): *Cardiopulmonary nematodes of dogs and cats***

Contents:

Lecture: cardiopulmonary helminths of carnivores: epidemiology, hosts, clinics, diagnostics. Major lungworms of cats (*Aelurostrongylus abstrusus*); and dogs: *Angiostrongylus vasorum* research (genetics, diagnostics, pathogenesis) – *Capillaria boehmi* and *aerophila* – *Crenosoma vulpis*

Practical activity: Microscopy of adult nematodes and larvae, morphological identification

(Evening/Dinner: at your own disposal)

## **Tuesday 3<sup>rd</sup> June**

**8:15-10:15: Lecture and practical activity (MS, DB, GM): *Food-borne parasites***

Contents:

Lecture: Recent results on food-borne parasites

Practical activity: Basic methods for isolation of food-borne parasites from vegetables

**10.15-10:45: Coffee break**

**10:45-12:15: Lecture (CR): *Toxoplasma gondii and other Coccidia: from fundamental to applied research***

Contents: Introduction of the Molecular Parasitology group; Introduction into Apicomplexa cell biology; novel experimental approaches in *T. gondii* systems biology; dissemination and persistence; immunological control; sexual development in the cat, transcriptomics.

**12:15-13:15: Lunch at Mensa of Veterinary Faculty**

**13.15-14.15: Practical activity (CR): *Practice in database search***

Contents: Hands on, using databases for practical applications

**14.15-15.15: Lecture and practical activity (GM, KV): *Avian malaria***

**15.15-15.45: Coffee break**

**15.45-16.30: Lecture (HH): *Introduction to the Thursday excursion Gastrointestinal nematodes in small ruminants: current problems and potential solutions***

Contents: preliminary information for the excursion; overview on GINs small ruminants, incl. IPZ Research.

**16.30-17.30:** Practical activity (NV & Team): ***Demonstration of insect vector trapping***  
Contents: Introduction of the Vector Entomology group; Setting traps in the surroundings.

**Dinner:** together, tbd (unless the participants prefer to have time at their own disposal)

## **Wednesday 4<sup>th</sup> June**

Full day at Institute of Parasitology, University of Bern

**7:15** Departure in front of IPZ

8:30 – 10:15: Lecture & paper discussion (CF): ***Important pasture-acquired helminths in dairy cattle***

Content: Lecture: Epidemiological situation of *Ostertagia ostertagi*, *Fasciola hepatica* & *Dictyocaulus viviparus* in Switzerland. Discussion of paper; pros and cons of milk serology, assessment of deworming strategies.

**10:15 -10:45: Coffee break**

10:45 – 12:15: Lecture & microscopy (BLS): ***Starving a deadly parasite: basic research on Echinococcus multilocularis***

Content: lecture on project, demonstration of *in vitro* culture

**12:15-13:15:** Lunch at Mensa of PH Bern

**13:15 – 15:00:** Lecture & practical activity (NW): ***Fasciola hepatica in vitro cycle, resistance markers***

Content: lecture on project, practical dissection of liver

**15:00 – 15:30: Coffee break**

15.30-17.00: Lecture and practical activity (WB): ***Cyst-forming coccidian parasites in veterinary medicine: clinical, diagnostic and epidemiological aspects.***

Lecture: Clinical, diagnostic and epidemiological aspects of toxoplasmosis, neosporosis besnoitiosis and sarcocystiosis in animals.

Practical activity: Discussion of clinical cases and study of histological slides and fresh clinical samples.

**17:30 – 18: 30: guided city tour in Bern, Unesco World heritage tour**

**Dinner at Kornhauskeller Bern**

## **Thursday 8<sup>th</sup> June**

Full day excursion with visits of goat and horse farm in alpine and prealpine areas of Switzerland

**7:15:** Departure in front of IPZ

Lecture (HH): ***Management of gastrointestinal nematodes in small ruminants and horses***

Contents: Gastrointestinal nematodes of small ruminants and horses, epidemiology with focus on the (pre-) alpine region, pasture management, clinic, diagnostic, control measures (monitoring strategies), anthelmintic resistance

Practical activities (HH)

Visit of a goat and a horse enterprise performing advanced parasite control measures. Collection and analysis of samples from animals and pasture; FAMACHA test

(Evening/Dinner: at your own disposal)

## **Friday 9<sup>th</sup> June**

**8.00-9.45:** Lecture (NV & Team): ***Very important parasites: arthropods***

Content: *Digest of biology of important arthropods, with a focus on arthropod vectors (modes of pathogen transmission by arthropod vectors; basic reproduction number  $R_0$  equation).*

**9.45-10.15:** Coffee break

**10:15-10:45:** Lecture (NV & Team): ***Vector entomology group; recent and current research***

**10:45 – 12:15** Practical activity: ***Demonstration of insect vector trapping and research facilities***

**12:15-13:00:** Lunch at Mensa of Veterinary Faculty

**13:00 – 15.30:** Practical activity and Lecture (NV and others): ***Identification of vectors, vector competence***

Contents: Morphological mosquito & biting midge identification, LAMP, mosquito behaviour  
Vector competence studies: mosquito feeding and saliva collection

**15.30-16:00:** Coffee break

**16:00-17:30:** Exam

**17.45-19.00:** Guided Tour at the Animal Hospital of the Vetsuisse Faculty, Zurich (DB, MS)  
Tbd: Lecture: *Accreditation of a diagnostic laboratory, planning, quality management, standardization*

From approx. 19:00: Diploma delivery and Farewell BBQ at the Institute.

## **Saturday 10<sup>th</sup> June**

**8:30-16:00:** Optional for EVPC Residents: Study of IPZ specimen collection (JC, GM, FG, AOE)