

## **Core Clinical Training (CCT) in Parasitic Diseases**

Objectives: The present teaching module aims to ensure that the student is able to correctly approach the management of a parasitosis, both by applying basic diagnostic tools and by correctly assessing the consequences of the host / parasite / environment relationship in order to set up prophylaxis plans to control and prevent the pathological phenomenon and its socio-economic impact.

. Specifically, the training in Parasitic Diseases has the objective of ensuring that the student is able:

• **"transversal" skills and competences** (independent judgment; communication skills; ability to learn):

1. To carry out group work;
2. to identify the correct parasitological diagnostic approach;
3. to find and use bibliographic material to deepen the parasitological diagnosis;
4. to communicate a parasitological diagnosis suggesting a prophylactic approach.

• **Practical professional skills:** (applied knowledge and understanding)

### **Common skills for different animal species**

1. To apply a correct anamnestic and clinical approach to the suspect of parasitosis.
2. To collect, store, transport and send adequately the most common biological samples (blood, faeces, urine, skin scrapings) for a direct parasitic diagnosis.
3. To manipulate the biological samples correctly and use the appropriate PPE in order to minimize the risks for the operator.
4. To perform basic parasitological examinations on biological samples.
5. To ensure proper handling and preservation of parasites for identification purposes.

### **Specific skills: pets:**

1. To reach a diagnosis of parasitic disease in pets based on anamnestic, clinical and laboratory data
2. Provide to the owner advice on the management of parasites in their pet (cleaning, prophylaxis, etc.)
3. Provide to the owner with appropriate advice and explanations regarding the zoonotic risk of the parasitic diseases of pets

### **Specific skills: livestock:**

1. To apply correct sampling approaches at farm level
2. To reach a diagnosis of parasitic disease in farm animals based on anamnestic, clinical and laboratory data
3. To provide the farmer and / or the owner with useful prophylactic and management advice in order to reduce the spread of the parasite and limit any zoonotic risk.

### **Specific skills - marine and freshwater fish species:**

1. To learn the diagnostic techniques for finding zoonotic parasites in marine and freshwater fish species
2. To know the basics related to morphological and molecular approach for the identification of fish-borne zoonotic parasites most commonly found in our country

*The specific laboratory activities included in the abilities listed above, where required, will follow the operating instructions of the Mycology, Parasitology and Fish Pathology laboratories.*

Evaluation - The assessment methods of the skills acquired by the student during the CCT are detailed in the attached assessment procedure.

**SYLLABUS**

<b>Themes and skills acquired</b>	<b>Topics</b>	<b>Specific contents</b>
Ability to manage the diagnosis and prophylactic approach of a parasitic disease and communication with the pet's owner	Diagnosis and control of parasitoses of pets with study or simulations of clinical cases or problem situations	Evaluation of anamnestic and clinical data relating to companion animals with suspected parasitosis
		Execution of appropriate parasitological analysis on different biological samples; approach to literature search for specific insights
		Evaluation of the results of the laboratory analysis with reference to case history and clinical data
		Prophylactic approach to the management of the parasitosis and answers to the owners' FAQ
		Presentation and discussion of a final report
Ability to manage the diagnosis and prophylactic approach of a parasitic animal in livestock	Diagnostics and control of parasitoses of livestock with study or simulations of clinical cases or problem situations	Anamnesis and evaluation of the managerial aspects of a farm in relation to the spread of parasites and correct sampling approach
		Execution of appropriate parasitological analysis on different biological samples collected by students during farm visits of the CCT of Anatomy-Pathology Diagnostics Practice and Transmissible Diseases;
		Evaluation of laboratory results in relation to medical history, clinical data and the management aspects of a farm; approach to literature search for specific insights
		Set the correct prophylaxis planning and management of health risks of the parasites in farm
		Presentation and discussion of a final report
Ability to apply a correct approach to the diagnosis of parasitic fish diseases of fish origin	Techniques for the detection of fish-borne parasitic zoonoses	Detection and identification of cestodes and trematodes in freshwater fishes
		Detection and identification of nematodes Anisakidae in marine fish species
		Application of molecular techniques for the identification of zoonotic parasites

The topics are susceptible to variations imposed by the real case studies concerning the Services of the Department of Veterinary Medical Sciences and the availability of fish material with respect to fishing stop