

# EUROPEAN VETERINARY PARASITOLOGY COLLEGE

## TRAINING PROGRAMME FOR DIPLOMATE STATUS

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### I DEFINITION

Either a Standard or an Alternative Training Programme (see below) allows graduate veterinarians to acquire in-depth knowledge of Veterinary Parasitology and its supporting disciplines under the supervision and guidance of a Diplomate or Diplomates of the EVPC.

### II OBJECTIVES

#### a) General

- i) To promote aptitude and proficiency in Veterinary Parasitology
- ii) To instruct graduate veterinarians in the science and practice of Veterinary Parasitology and its supporting disciplines (zoology, immunology, general epidemiology, pathology, pharmacology)
- iii) To provide graduate veterinarians with the opportunity to pursue a career in the teaching, research, diagnostic, industrial or regulatory/governmental practice of Veterinary Parasitology
- iv) To advance Veterinary Parasitology through promotion of research and publications.

#### b) Specific objectives - knowledge and skills

##### i) Generic knowledge and skills

- To a standard consistent with postgraduate level, the Diplomate should:
- be able to communicate clearly in oral and written form in the English language
- be able to approach problems in an analytical, scientific way to find solutions and to be able to assign priorities for these solutions
- be able to organise work efficiently and effectively
- be able to document observations and results methodically and accurately
- be able to find information quickly
- be able to develop scientific activities in order to contribute to the development of Veterinary Parasitology
- be aware of contemporary standards of quality and safety relevant to the execution of the speciality
- be aware of up-to-date developments in the speciality
- be acquainted with the structures, objectives, approaches and problems of the veterinary profession and specifically with regard to Veterinary Parasitology
- be aware of the social role of the speciality
- understand the possibilities that other specialities have to offer and the value of multi-disciplinarity
- have developed the self-confidence, self-criticism and sense of responsibility essential for practice of the speciality, including the requisite ethical and professional standards
- have developed the ability and motivation for continued life-long learning

##### ii) Knowledge and skills concerning General Parasitology

The Diplomate should:

- be familiar with the broad taxonomy of parasites and their relationship to non-parasite species
- have knowledge of comparative (human) parasitology and its bearing on veterinary parasitology

With respect to the major parasites of veterinary and zoonotic interest:

- have a thorough knowledge of their biology and life history, including, where relevant, their vectors
- have an up-to-date knowledge of their global prevalence and distribution and an awareness of their economic effects and relative importance
- be expert on the morphology and identification of the most common European parasites and also typical examples of less common or important groups (spirurids, for example)
- understand their host-parasite relationships particularly in respect of their pathology, host-immune responses and mechanisms to evade such immune responses
- understand their epidemiology and the factors which determine it and may modify it, and be aware of the zoonotic risk
- be familiar with OIE recommendations as applied to parasitic infections
- understand the principles of control strategies through a knowledge of historic as well as current experience

iii) Knowledge and skills concerning Clinical Veterinary Parasitology

Particularly with respect to parasitic infection of domesticated animals but also, where relevant, with respect to those of non-domesticated species, the Diplomate should:

- be familiar with the clinical presentation of parasitic diseases and be competent in their clinical examination and diagnosis
- know what diagnostic investigations to undertake and be skilled in their execution at individual or population levels
- be able to appropriately treat and instigate control measures at individual or population levels, including against vectors
- be able to advise and implement prophylactic measures
- be able to develop, advise and implement national or international surveillance or public health measures, including those in abattoirs or food processing operations

iv) Knowledge and skills concerning Laboratory Veterinary Parasitology

The Diplomate should:

- be competent in the handling and storage of laboratory samples for parasitological examination, including compliance with health and safety regulations in the laboratory and in transit
- be skilled in methods for the qualitative and quantitative examination of samples for evidence of parasitic infection by either direct or indirect means including immunological, biochemical and nucleic-acid-based methods
- understand the limitations of diagnostic methods and their sensitivities and specificities, and be able to determine them
- be able to identify parasites in diagnostic samples, including in tissues either grossly or histopathologically
- be competent in the methods of sampling the environment for parasites
- be able to identify parasite vectors, detect and identify parasites in vectors, and be familiar with methods for the study of vector biology

v) Knowledge and skills concerning Research in Veterinary Parasitology

The Diplomate should:

- understand the principles of scientific method, and hypothesis generation and testing
- have a basic knowledge of statistical methods, including the ability to design experiments and efficacy trials which will achieve statistically meaningful results with due regards to animal welfare
- be familiar with legislation affecting research including ethical approval
- be aware of the regulatory processes for vaccine and drug approval
- understand the mechanisms and pathways of drug or vaccine discovery and development
- be able to produce precise and concise reports and manuscripts, including analysis of data and valid interpretations and conclusions, such that it can pass peer review

### III TRAINING PROGRAMMES

#### a) Minimum Specifications

Whichever pathway (Standard or Alternative) is followed, the following minimum criteria must be met:

- The duration of the programme shall be not less than 36 months within 6 consecutive years
- The programme shall be supervised by a Diplomate of the EVPC (the Supervisor), who may be assisted by other appropriately qualified advisers who will either be Diplomates of the EVPC or of cognate colleges where appropriate - e.g. Public Health or Medicine] or alternatively qualified, in which case their CVs should be submitted with the application. Additional procedures should be in place in the primary host institution to support the candidate and arbitrate in the event of problems with supervision.
- Learning environments
  - The environment should provide the intellectual and physical facilities for the advancement of the knowledge of pathophysiologic mechanisms of parasitic diseases at a molecular, cellular, organ and whole animal level and their consequences. Services and equipment required for standard or alternative training programmes preparing candidates for EVPC examination must be approved by Education Committee and include:
    - Veterinary/Medical library  
A library containing current textbooks and journals relating to Veterinary Parasitology and its supporting disciplines must be readily accessible directly or electronically to the programme participant. Additionally, full electronic access to the websites concerning Veterinary Parasitology must be readily available.
    - Clinical and necropsy facilities  
Key facilities must meet the requirements of the European system of evaluation of veterinary training including animal welfare and hygiene
    - Laboratory facilities  
Veterinary Parasitology Laboratory standards that must be met include: compliance with health and safety standards; written operational procedures and policies, current methodologies and technologies; a programme for quality management including quality control and proficiency testing; a laboratory information management system; the documentation of personnel training and development; and a duty parasitologist (Active Diplomate or Associate)

## **b) Types of Training Programme**

### **i) Standard Residency Programme**

This comprises an integrated programme specifically for the purpose of preparing candidates for the EVPC, conducted mainly at one site (but with external rotations).

### **ii) Alternative Programme**

The College recognises that many veterinary parasitologists have acquired and will continue to acquire their expertise in other ways. Alternative Programmes can be constructed by the supervising Diplomate for each candidate and may, for example, include a taught Masters programme, a research degree, and periods of relevant practical experience. In every case, the minimum specifications as defined above must be met, including the suitability of the learning environment for each component. Taught programmes may be approved as suitable elements within an Alternative Programme by application to the Education Committee and a list of such programmes will be maintained on the EVPC website.

## **c) Continuing Education**

National and international continuing education programmes, meetings and courses are essential additional learning sources. Suitable continuing education may include, for example, those programmes, meetings and courses organised by or under the auspices of the European Veterinary Parasitology College and eventually WAAVP and/or European Federation of Parasitologists and/or of National Societies of Parasitology Congress and Meetings.

## **d) Preparation for the Examination**

The candidate's goal should be to acquire sufficient knowledge to assume responsibility for the broad spectrum of problems encountered by veterinary parasitologists. The College believes training can be best accomplished in units (departments, institutions) where there are several Diplomates of the College and where there is training in veterinary clinical parasitology. The College recognises that training also occurs effectively in other settings but believes, in general, it may require more time. Periods of attendance in other institutions are necessary to broaden training and preparation for examination. In addition to academic studies calculated to provide adequate insight into basic principles of veterinary parasitology, the candidates must have practical experience in performing their professional duties. These should include the application of all standard methods and procedures of clinical veterinary parasitology to any given case, with a view to demonstrating the nature of the disease process, or to making a diagnosis, or both.

The certificate of membership of the College is granted only after the applicant has completed a period of training and has demonstrated, by thorough formal examination, the ability to perform the duties and assume the responsibilities of a veterinary parasitologist. Standards that must be met are strict and the study and training arduous.

## **e) Roles**

### **i) Role of the Residency Programme Director**

- Each standard training (Residency) programme shall have a Residency Programme Director, who shall be a Diplomate of the EVPC, and a senior member of staff at the institution hosting the residency
- The Programme Director is responsible for the application for approval of the Residency Programme to the EVPC Education Committee and for ensuring it continues to meet the requirements of the EVPC notwithstanding that formal re-approval is required only every 5 years.
  - The Residency Programme Director can act as a Supervisor.

ii) Role of the Supervising Diplomate

- One Diplomate may supervise up to 3 residents concurrently.
- The Supervisor shall be responsible for the administration and supervision of the candidates' progress through the Training Programme. This will require frequent contact and at least four formal, recorded meetings per year to assess progress and performance, and to review the Portfolio of Activity.
- The Supervisor shall be responsible for ensuring that all facilities (including case material) required by the minimum specifications are available in each phase of the programme.

iii) Role of the Candidate

- The candidate must maintain a Portfolio of Activity which documents:
  - training activities undertaken, with objectives, dates, outcomes;
  - clinical cases or outbreaks investigated, with history, methods, interventions and outcomes;
  - presentations, seminars, conferences, continuing education given/attended, with dates and titles;
  - publications by the candidate.

Annually, the candidate must submit, to the Secretary of the Education Committee, EVPC, a statement, co-signed by the Supervisor, confirming that the four supervisory meetings have been held, and that progress has been deemed satisfactory. Failure to submit such a statement within 3 months of each annual review date will be taken as withdrawal from the programme.

## **IV APPROVAL OF PROGRAMMES**

### **a) Residency Training Programmes**

Residency training programmes must be approved by the Education Committee after application by the Programme Director, using the appropriate form (Residency Training Programme Approval Application Form), three months in advance of the first residency commencing. Approval of a Residency Programme shall apply for 5 years for any number of candidates commencing within that time. Residency training programmes are subject to renewed approval every 5 years. A list of approved Residency Programmes is maintained on the EVPC website.

### **b) Alternative Programmes**

For each applicant pursuing an Alternative Programme, individual application must be made by the candidate, countersigned by the supervising Diplomate, for approval by the Education Committee, using the Alternative Training Programme Application Form. Application must be made 3 months prior to commencement of the programme. Each element and environment involved in the Alternative Programme is subject to the same scrutiny and standards as a Residency Programme.