# THE EUROPEAN COLLEGE

**OF** 

# POULTRY VETERINARY SCIENCE

(ECPVS)

TRAINING PROGRAM

2017

# TABLE OF CONTENTS

Chapter 1. The Poultry Science Residency Program	3
1. Definition	3
2. Objectives of the Poultry Science Residency Program	3
3. Specific objectives of the Poultry Science Residency Program	4
4. Requirements for entry in the Poultry Science Residency program	5
5. Description of the Poultry Science Residency Program	6
6. Total time requirements of the Poultry Science Residency Program	8
7. Contents of the Poultry Science Residency Program	10
8. Documentation and verification of the Poultry Science Residency Program	12
9. Facilities, services, and equipment required in an approved Poultry Science Residueles	dency
Program	13
10. Alternative training programs.	14
Chapter 2. ECPVS examination	15
1. Application	15
2. Examination	18
3. Appeal	19

#### TRAINING PROGRAM

# Chapter 1

# The Poultry Science Residency Program

# 1. Definition

The training program of the ECPVS is a training program that should deliver in-depth knowledge of Poultry Health and all other fields related to Poultry Veterinary Science. The program has to be approved by the Education Committee and has to be performed under the supervision and guidance of one or more Diplomates eventually assisted by other experienced persons as defined by the ECPVS Credentials Committee.

# 2. Objectives of the Poultry Science Residency Program

- To improve and increase the quality and level of poultry science
- To train and educate suitable applicants in Poultry Veterinary Science in order to recruit people needed in the field of poultry medicine and requested by the different stake holders
- To provide the Resident with the opportunity to pursue a career in the area of poultry veterinary science

# 3. Specific objectives of the Poultry Science Residency Program

The specialist should be able to:

- recognise and work-up problems related to all aspects of the specialty
- perform all procedures according to the principles of good veterinary practice
- co-operate with specialists and colleagues in other related and complementary disciplines, to the benefit of poultry science under his/her care, animal welfare, poultry owners / clients, colleagues, the consumer of poultry meat and eggs, the public in general and the environment
- contribute to the development and application of concepts and methods in poultry science, with special focus on management and disease prevention
- perform clinical investigations on poultry farms
- perform diagnostic and therapeutic procedures in poultry on site and in the laboratory
- establish indications for laboratory diagnostic support (e.g. gross pathology), perform laboratory diagnostic procedures and/or interpret the outcome (e.g. of virological, parasitical, bacteriological, histopathological and serological examinations), take actions and give advice on the basis of knowledge of flock health and preventive medicine, zoonoses, nutrition, housing and environment
- work in multiple discipline approaches and projects
- recognise new developments in the specialty and be capable to justify the importance of such novelties
- evaluate the importance of national and EU regulations with regard to all aspects of poultry production including the usage of poultry products
- promote communication and dissemination in the discipline
- communicate results, thoughts and ideas to other members of the college and people outside the speciality
- keep a high moral and ethical standard in all subjects which are in liaison with the college

Succeeding the training program the specialist should be acquainted with his role as a specialist and the speciality itself.

#### 4. Requirements for entry in the Poultry Science Residency program

# Professional requirements

An internship program of at least 1 year has to be performed prior to the training program. The internship program should deliver the minimal level of clinical experience in poultry medicine. The internship program should cover all aspects of poultry medicine and should be supervised by at least one ECPVS Diplomate. Following completion the attendee should obtain a certificate signed by the supervisor. A general formulary supplied by the Credentials Committee of the College or a similar formulary can be used. The successful attendance of an internship is a prerequisite to proceed with the training program.

The internship program should focus on a broad training and experience in clinical poultry health management and the supporting disciplines, as defined by the Education Committee. Such disciplines are mostly represented by the Colleges with which the ECPVS shows some obvious overlaps (see constitution and bylaws). The overall character of the internship could be a rotating program. In this instance rotating may be taken to mean either rotating between a specialist training centre such as a university department and an approved poultry practice or between at least two specialist training centres. An example of an equivalent to this would be a period of at least one year in an approved poultry practice, with evidence of significant postgraduate continuing education. During this time Interns will obtain a basic training in general poultry medicine.

Internship programs should meet the requirements for each of the three categories (i-iii) listed below.

#### i. Period of training

The program should include a minimum of 12 months clinical experience

#### ii. Conditions of training

- The program should cover all aspects of general poultry practice
- The program should be under the supervision of at least one ECPVS Diplomate

#### iii. Documentation of training

The program should document for each intern the dates on which the period of training commenced and ended, and the name of the supervisor. A certificate of internship and/or a covering letter signed by the supervisor are sufficient.

If a candidate's internship program does not meet these general guidelines, the candidate should if possible submit a description of his/her program to the Education Committee for approval before beginning the Internship. If this is not done then a description should be submitted within 60 days of beginning the internship program. Under these circumstances the Education Committee may advise on modifications to the Internship (including extending it) to make up any deficiencies in the Intern's prior experience and training.

#### Residency program - Administrative requirements

Each Resident should have a Program Director and a Resident Advisor:

The Program Director has to be a Diplomate of the ECPVS and is responsible for the administration and continuity of the Program. He/she will assign a Resident Advisor. The Resident Advisor has to be a Diplomate of the ECPVS or an equivalent as defined by the Credentials Committee. He/she may train up to three residents concurrently. He/she is responsible for the administration and evaluation of the general and specific program requirements for the Resident. The Program Director and Resident Advisor may be the same individual. At each institution or practice involved in Poultry Medicine, the applicant should have a Supervisor. Supervisors should preferentially be Diplomates of the ECPVS, or an equivalent as defined by the Credentials Committee. Supervisors may have a Diplomate from a speciality related to Poultry Science.

#### 5. Description of the Poultry Science Residency Program

A residency program in poultry medicine according to Article 5 of the ECPVS bylaws shall consist of a period of at least three years of supervised training, postgraduate education, and clinical experience in the science and practice of poultry medicine and its supporting disciplines under the supervision of one (or in some circumstances more than one) Diplomate of the College, eventually assisted by other experienced persons as defined by the

Credentials Committee. The period can be taken consecutively or on a part-time basis as long as the total time corresponds to at least three years and the total period does not exceed seven years. On the other hand, the approved postgraduate period of internship and residency programs should take at least 4 years. Training will take place under the supervision of at least one (1) Diplomate who participates actively in that program or its equivalent, as defined by the ECPVS Credentials Committee. There shall be no restriction on training institutions/approved practices as long as they meet the requirements for approved residency agreed by the Education Committee. Residents are encouraged to gain experience in more than one institution or approved practice during the period of their training in order to ensure they experience a sufficiently wide caseload to gain experience into all aspects of the specialty.

In all cases, the Education Committee will approve the training program of each institution in consultation where necessary with the Credentials Committee. In undertaking this process, the Education Committee will take due regard of the required level of training in areas of overlap between the disciplines covered by the ECPVS and other EBVS approved European Veterinary Colleges. The areas of overlap with these associated disciplines should be taught by either a Diplomate of the Colleges concerned or an equivalent as defined by the Credentials Committee. It is not possible to be prescriptive regarding the exact quantity of training required in these overlapping disciplines as each training program will be uniquely tailored to the needs of the trainee. However, general guidelines are available to the Education Committee when assessing the suitability of a training program. As many poultry species play an important role in food production, some work should be performed in areas dealing with production disciplines and quality assurance. This could either be in the hosting institution in which the residency program is performed or an equivalent. Most suitable in this context are colleges which demonstrate an overlap with the ECPVS in this area, like the European Colleges of Veterinary Public Health, Veterinary Comparative Nutrition, Clinical Pathology, Parasitology and Pharmacolgy and Toxicology.

#### 6. Total time requirements of the Poultry Science Residency Program

# Clinical poultry practice

Residents must spend about 25 to 75% for the residency programs of the at least three year program in a poultry practice or diagnostic institution dealing with the different aspects of poultry diseases under the direction of a Diplomate of the ECPVS, eventually assisted by other experienced persons as defined by the Credentials Committee.

The Resident must spend 50% of his/her time with a Diplomate of ECPVS to gain a training in post-mortem techniques, sample collection, sample packaging/transport, processing in the laboratory including routine bacteriological, parasitological, serological and virological methods, evaluating pathological and serological findings, understanding of all relevant terminology and nomenclature. Residents should attend conferences and/or seminars dealing with laboratory methods, even if the subject being discussed does not always originate from poultry species.

This intense laboratory training is required to teach the trainee more about the activities of the laboratory and how to work with the laboratory when investigating problems in the field. Participation, discussion and observation within the laboratory should lead to a deeper appreciation and understanding of the teamwork required by the clinical working specialist and the laboratory personnel.

#### Scientific training

Residents must spend at least 25% of their individual residency program of the at least three year program in one or more of the following ways:

#### Research and publications

### Research project/s

The Resident must complete a full or part-time investigative project that contributes to the advancement of poultry science over a period of at least 12 months. This may produce some of the material referred to in 6.2.2. below. This may be part of graduate degree studies. Furthermore, this could be part of a post-graduate training, for example a PhD.

- Publications to be produced by all candidates

Two (2) original papers in peer reviewed scientific journals included in the Science Citation Index, one of which should be published as first author in an international peer reviewed scientific journal. In addition, five case reports related to poultry medicine personally handled, with a maximum of 3000 words each, which give an impression of the analytical approach of the candidate. As an alternative for a case report the co-authorship in an original paper in a peer reviewed scientific journal is acceptable.

# Seminar and teaching responsibilities:

- Definition of seminar: a scientific presentation, which is followed by a discussion period, the total time being at least 45 minutes.
- Seminar requirement: the Resident must present a minimum of 6 seminars during the Program. Seminars should be advertised and should allow public access.
- Resident's conference presentations: the Resident must present at least two papers at a suitable conference or comparable meeting. At least one presentation has to be at a meeting or conference on a national or international level.
- Teaching: the Resident is required to participate in the clinical education of graduate veterinarians and/or veterinary undergraduate students. This dedication should be at least 0.25 to 0.5 ECTS, respectively, for candidates following an academic and alternative residency programs.

#### Continuing education

Continuing education programs, as the sole method of training will not meet the requirements of certification as a Diplomate. Good quality continuing education courses may be part of the Residency training program.

#### Attending conferences

- The Resident is required to attend "in house" resident conferences, formal case discussion sessions, journal clubs, seminars, etc.
- Residents should attend at least 3 national or international poultry science conferences during the Residency Program. Attendance at other scientific presentations, especially in affiliated disciplines (laboratory diagnostics, etc.) is

also to be encouraged. Many different organisations and institutions have been identified that already provide such courses, meetings and programs.

#### 7. Contents of the Poultry Science Residency Program

The resident should gain an in-depth and detailed knowledge of the following areas of poultry science (unless stated otherwise):

#### Infectious diseases

The majority of poultry diseases are of infectious aetiology, some of which are moreover zoonoses transmitted either directly or indirectly. This explains why these diseases should have a special focus during the program. This includes the various aspects of prevention and treatment based on reliable diagnosis.

Viral, bacterial, mycotic and parasitical diseases and syndromes of poultry which are commonly encountered in Europe, including their aetiology, epidemiology, prevalence, pathology, differential diagnosis, diagnosis, treatment, control and prevention. This should be independent from the biology of the pathogen, whether it is host restricted or transferable to other animals and humans. Furthermore, the global situation should be kept in mind to draw up a suitable strategy for disease prevention.

Diagnostic methods (at individual and flock levels) including clinical examination, case recording, post-mortem examination, collection and preservation of samples for laboratory examination, routine diagnostic laboratory techniques, interpretation of laboratory results.

Special attention has to be given towards all prophylactic attempts to prevent infectious diseases. This could be vaccination considering the relevant details of the immune system or biosecurity which demonstrates the importance of management practises.

Knowledge about notifiable diseases or diseases listed in special monitoring programs, both on national and international level should be an important element of the program.

Accreditation and the consequences for the laboratory work should have a high priority throughout the program. The value of SOPs, ring tests etc. should be validated aiming for the improvement of laboratory results and the standardization of methods.

#### Management

The program should contain various aspects of management practises considering the variety of poultry species and housing systems. Usually this would start on an individual bird and flock level independent of the size of the flock.

Special attention has to be given to all areas in which integrated poultry production is performed. This has numerous consequences on the daily work considering the overlaps between different stages of the production process. For this, epidemiological principles, methods and techniques such as risk assessment in flocks have to be applied. This does also include programs performed on national or international level.

The application of the relevant export and import rules and regulations both within Europe and with countries outside Europe has to be practised. It could be advisable to have a basic working knowledge of biostatistics.

Awareness of information and communication technology, data-handling and the use of computer technology in flock health programs should also be part of the training.

Part of the Management system could also be to work with production indices in special areas indicating the close link between management, economics and diseases.

#### Poultry production

Economics. Structure and economics of the European poultry industry including the aspects of marketing poultry products. Considering the global trade the program should also contain the global aspects of trading poultry and the products thereof.

Genetics. Awareness of differences between breeds belonging to the same species and the consequences for production purposes. Special attention has to be given to disease susceptibility of different poultry species and breeds within one species.

Housing and production systems: a detailed knowledge of all aspects of commonly used production systems. Poultry housing and its impact on health, animal welfare and disease for all species of poultry and production forms.

Nutrition. Anatomy, physiology and principles of normal digestion, methods of feed analysis, an understanding of principles of diet formulation, nutritional requirements of poultry species at different ages and stages of production, common dietary constituents

used in compounding and formulating rations, various commonly used methods of feed storage and conservation, feed supplements and additives, methods of food dispensing. Furthermore, knowledge should exist about the importance of feed as vehicle for introducing pathogens into poultry environments.

Animal welfare and ethics. Normal behavioural patterns and their alteration by stress and disease. Welfare standards on the farm should be assessed during transport and at the slaughterhouse. The relevant national and EU legislation has to be adopted on flock level.

Food safety. Pre-harvest food safety measures (Salmonella control, Campylobacter monitoring, prudent use of antibiotics etc.), meat inspection data and slaughterhouse details. Flock Health Planning and Quality Assurance Schemes.

Drugs. Therapeutics and medicines control, prudent use of antibiotics. Clinical trials. EU medicine legislation. The administration of medicines and their strategic use on flock levels.

Reporting and communication. Scientific writing and the presentation of reports from investigations in the scientific literature. Report writing for clients. Communication skills to other people interested in specific subjects.

#### 8. Documentation and verification of the Poultry Science Residency Program

The Program Director, Resident Advisor, Resident and the European College of Poultry Veterinary Science have responsibilities for documentation and verification of satisfactory training for each Resident.

The Program Director is responsible for:

- Verification of pre-residency training and presence of suitable facilities, equipment, and supplies within 30 days of program initiation.
- Distribution of the documentation and verification forms to each Resident annually.
- The appropriate financing of the program during its whole period of time

#### The Resident Advisor is responsible for:

- Verification of semi-annual progress and performance evaluations
- Verification of the Resident Activity Log
- Verification of the Resident Dossier
- Stimulation and facilitation of interdisciplinary contacts and co-operation where appropriate
- Keeping an annual report on the Resident based on the first three items of this paragraph, signed by both the Resident and the Resident Advisor.

# The Resident is responsible for:

- Maintenance of the Resident Activity Log (indicating his/her training steps, results achieved, service provided, instructions completed)
- Maintenance of the Resident Dossier (comprising the Activity Logbook along with lists of presentations, publications, seminars given/attended, congress/conference attendance, documentation on external training)
- Providing annually updated curriculum vitae to the Resident Advisor and Program Director
- Submission of copies of the updated Resident Activity and Resident Dossier to the Resident Advisor.

The Resident Advisor is responsible for evaluation of the Resident's progress and will communicate deficiencies to the Resident. In case of structural deficiencies the Education Committee will be notified by the Resident Advisor or the Resident.

# 9. Facilities, services, and equipment required in an approved Poultry Science Residency Program.

- Library: a library containing recent textbooks and current journals relating to poultry medicine and its supporting disciplines must be accessible to the program participants.
- Access to clinical cases
- Records: a complete record must be maintained for each case and those records must be retrievable.

- Computer facilities: up-to-date computer facilities with access to the Internet and relevant software including an automated literature search system.
- Diagnostic investigations: appropriate rooms for pathological examination and all laboratory investigations must be available.

# 10. Alternative training programs

The Education Committee and the Credentials Committee can approve alternative training programs that deviate from some aspects rendered in this chapter under 4 and/or 5, as far as the alternative program guarantees achievement of the objectives given under 2 and 3, complies with the points raised under 6 and 7, and fulfils the requirements of 8 and 9.

#### Chapter 2

#### **ECPVS** examinations

# 1. Application

Applicants must submit four full copies of their credentials to the Secretary on or at least 4 months before the planned examination. Late or incomplete applications will not be processed or reviewed.

All candidates must submit the standard application form of the College together with other required documents and the application fee. The credentials must verify the successful completion of a standard Residency or alternative training program.

The responsibility for accuracy and availability of all required credentials rests with the applicant.

#### Documentation

The following completed and verified documentation must accompany the application:

- a. Complete Application Form available from the Secretary
- b. Curriculum vitae the CV should contain the following data, for which a fill in form is available at the College secretariat:
  - Personal particulars: name, address, gender, date of birth
  - Education: colleges / universities, dates, degrees, other professional qualifications
  - Professional activities
  - Scientific organisations
  - Honours: professional, public service
  - Offices held: professional, public service
  - Professional presentations
  - Bibliography: peer reviewed publications, books and book chapters, all other publications
- c. Activity Log Book (for those having followed a residency program)

- d. sPrevious correspondence pertinent to the training program and application (for those having followed a residency program)
- e. Summaries of case reports as outlined in Chapter 1 (6.2.1) with a maximum of 3000 words each, which give an impression of the analytical approach of the candidate
- f. Reprints of research papers in international peer-reviewed veterinary or animal/livestock science journal. In all these papers, the applicant may have contributed to different extent indicated by the order of the authors.

In the case of papers accepted for publication but not yet published, letters of full acceptance and copies of accepted manuscripts are required; papers still undergoing peer review are not acceptable.

These seven categories of material must be arranged in the sequence listed, then indexed and bound in folders to prevent loss and to facilitate review. The applicant's name should be on the front of each folder.

#### Letter of reference

There must be a letter of reference from the Supervisor(s) at each institution or practice involved in the Residency Training Program. All letters must be from persons familiar with the candidate's post-graduate training program and mailed directly to the Secretary by each referee. These confidential letters are not to be forwarded by the candidate! Requests by the applicant for reference letters from supervisors and referees should be made early as to assure arrival with the Secretary on or before the application date. It is the applicant's responsibility to ensure that all letters are sent to the Secretary on time. The Credentials Committee is responsible for absolute discretion and confidentiality regarding the reference letter(s). After approval of the candidate to sit the examination, the reference letter(s) will be destroyed.

- Reference letters must document the following:
  - a. Verification of the Training Program and level of supervision.
  - b. The applicant's proficiency, judgement and competence as a specialist and academic readiness to sit the examination.
  - c. The commitment of the applicant to the constitutional objectives of the ECPVS
  - d. The moral and ethical standing of the applicant within the veterinary profession

#### Credentials evaluation fee

- a. The application will not be processed or evaluated without the application fee being paid in full.
- b. The application fee is non-refundable.
- c. If any portion of the application has to be resubmitted the fee will be payable again.
- d. The application fee for evaluation of credentials is set at €150. The fee may be changed at the discretion of the Board

If the credentials are accepted by the Credentials Committee and approved by the Board, the Secretary will then notify the applicant that he/she may proceed to the examination. The Examination Committee will notify successful applicants of the dates and procedure of examination.

Unsuccessful applicants will be notified at the same time by a letter explaining the deficiencies in their credentials. A subsequent reapplication must include resubmission of all credentials (four copies) including a written outline of the applicant's self-evaluation of his/her remedy to correct the deficiencies. The application materials must be presented in the manner previously described with the addition of the applicant's self-evaluation report. In cases where there were only minor or technical deficiencies in the credentials, the Credentials Committee may invite a reapplication of the credentials subject to the payment of another evaluation fee. Under these circumstances applicants will be informed of the Credentials Committees decision.

All correspondence regarding application procedure and notification should be addressed to the Secretary. All submitted application materials become the sole property of the ECPVS and will not be returned to the applicant.

#### Application fee

- a. The candidate is only allowed to take the examination if the examination fee has been paid.
- b. The examination fee is only refundable if the candidate is unable to attend the examination for health or grave personal problems (at the discretion of the Education Committee).
- c. The examination fee for the Certifying Examination is set at €600. The fees may be changed at the discretion of the Board.

#### 2. Examination

Candidates must pass the examination within five years after completion of the training program. Failure to satisfy this requirement necessitates that the candidate passes through the credentials process again and additional periods of training and/or experience may be required by the committee. The second approval by the Credentials Committee will be reviewed annually, the incoming Examination Committee Chairperson and the incoming Credentials Committee Chairperson having the option of recommending reapplication on a yearly basis.

The Annual Diploma Examination is composed of three separate parts:

- multiple choice questions
- essay questions
- conclusive case management examination, including all aspects of poultry veterinary science

The essay and case management elements of the examination will involve problem identification, analysis and problem solving applying specialist knowledge and skills.

The certifying examinations will be developed, administered and graded by the Examination Committee. They will be ratified by the Board.

Examination shall be taken in English only; the use of dictionaries (excluding veterinary dictionaries) is permitted.

The Chairperson of the Examination Committee will forward details of candidates who pass the examination to the President. The results of the examination will be forwarded to candidates in writing, within 30 days of the completion of the examination.

In cases where a candidate fails to satisfy the Examination Committee that he/she has reached the required standard, a brief written examiners report will also be provided to the candidate to aid his/her preparation for future examination attempts. A candidate must pass each section of the examination in the same sitting to become certified.

The candidate can sit on total on 4 occasions (maximum of 3 retakes).

# 3. Appeal

Any candidate who wishes to appeal the decision on failure in the examination must do so within 60 days of the postmarked date of his/her notification. The request for appeal must be made in writing to the Secretary of the College and shall include a statement of the grounds for reconsideration and any documentation in support of the petition.

The Secretary shall notify the President of the College and the Chairperson of the appropriate Examination Committee. The President shall appoint a committee of three Diplomates who are not officers or members of the Examination Committee to serve as an Appeals Committee within 60 days of notice of an appeal. The Chairperson of the Examination Committee shall submit the examination and scores of the candidate, the complete list of scores of all candidates on that examination, and a statement as to the criteria used for the committee's recommendation for pass and fail to the Appeals Committee indicating the reason(s) for rejecting the candidate.

The Appeals Committee shall meet and forward a decision to the President of the College within 180 days of appointment of the Committee.

If the affected party is not satisfied with the final decision rendered by the ECPVS Appeals Committee, he/she may request mediation by the Appeals Committee of the European Board of Veterinary Specialisation. Their decision will be final.

The President of the ECPVS will give his/her opinion to the members of this Appeals Committee who will inform him/her of their decision afterwards.