

ECPHM TRAINING BROCHURE

Last modified: July 2021

Table of contents

1	CHAPTER I - INTRODUCTION	3
2	CHAPTER II – ADMISSION TO THE COLLEGE	5
2.1	REQUIREMENTS TO BE A DIPLOMATE OF THE COLLEGE.....	5
2.2	QUALIFICATIONS TO SIT THE CERTIFYING EXAMINATION	5
2.3	REQUIREMENTS FOR ENTRY IN THE ECPHM RESIDENCY PROGRAMME	5
2.3.1	PROFESSIONAL REQUIREMENTS	5
2.3.2	INTERNSHIP PROGRAMME.....	6
3	CHAPTER III – ECPHM RESIDENCY PROGRAMME	7
3.1	MAIN OBJECTIVES	7
3.2	SPECIFIC OBJECTIVES.....	7
3.2.1	CONCERNING PRACTICING THE SPECIALTY	7
3.2.2	CONCERNING TRANSFER OF KNOWLEDGE	8
3.2.3	CONCERNING WORKING AS A PROFESSIONAL SPECIALIST	8
3.3	GENERAL SET-UP, TIMELINES AND TERMS	8
3.3.1	ADMINISTRATIVE FRAMEWORK.....	8
3.3.2	TRAINING INSTITUTION AND TYPE OF RESIDENCY	9
3.3.3	TIMELINES	10
3.3.4	DEFINITIONS OF TERMS	11
3.4	TOTAL TIME REQUIREMENTS FOR SPECIFIC PARTS OF THE ECPHM RESIDENCY PROGRAMME	12
3.4.1	PIG HERD HEALTH MANAGEMENT PRACTICE	12
3.4.2	ACADEMIC TRAINING	12
3.5	CONTENTS OF THE ECPHM RESIDENCY PROGRAMME.....	14
3.5.1	INFECTIOUS AND NON-INFECTIOUS DISEASES.....	14
3.5.2	REPRODUCTION	15
3.5.3	EPIDEMIOLOGY	15
3.5.4	ANIMAL PRODUCTION	15
3.5.5	ANIMAL WELFARE AND ETHICS.....	16
3.5.6	FOOD SAFETY	16
3.5.7	DRUGS	16
3.5.8	SURGERY AND ANAESTHESIA	16
3.5.9	REPORTING AND COMMUNICATION.....	16
3.6	DOCUMENTATION & VERIFICATION OF A ECPHM RESIDENCY PROGRAMME	17
3.7	FACILITIES, SERVICES & EQUIPMENT REQUIRED IN A ECPHM RESIDENCY PROGRAMME.	18
3.8	APPLICATION PROCEDURE FOR RESIDENCY PROGRAMMES.....	18

4	CHAPTER IV – APPLICATION FOR THE ECPHM EXAMINATION	19
4.1	DOCUMENTATION	19
4.1.1	APPLICATION FORM FOR CERTIFICATION BY EXAMINATION	19
4.1.2	CURRICULUM VITAE.....	20
4.1.3	ACTIVITY LOG BOOK	20
4.1.4	CORRESPONDENCE	21
4.1.5	CASE REPORTS.....	21
4.1.6	REPRINTS OF PORCINE HEALTH MANAGEMENT PAPERS	21
4.2	LETTERS OF REFERENCE	21
4.3	EVALUATION OF CREDENTIALS.....	22
4.3.1	CREDENTIALS EVALUATION FEE	22
4.3.2	EVALUATION PROCESS.....	22
5	CHAPTER V – ECPHM CERTIFYING EXAMINATION	23
5.1	EXAMINATION FEE	23
5.2	CERTIFYING EXAMINATION.....	23
5.3	REPEAT EXAMINATIONS	24

1 CHAPTER I - Introduction

The European College of Porcine Health Management (ECPHM) is a veterinary specialty organisation approved and fully recognized by the European Board of Veterinary Specialisation (EBVS). The ECPHM is an initiative of a group of European veterinarians, already recognised as nationally and internationally renowned specialists in the field of Porcine Health Management (PHM), in response to a growing demand for better veterinary services for pig herds through specialisation, and the need to harmonise postgraduate training. Diplomates of the College will have proven to have a thorough knowledge and experience in all aspects of the delivery of health care for pig populations, production management and all veterinary aspects of pork quality and safety.

The aims of the ECPHM are the improvement and promotion of:

- a) The quality of porcine health care and production management, by making available specialised knowledge and skills in PHM to the benefit of pigs, pig producers and consumers of pork and pork products.
- b) The quality of porcine health care and production management in general practice through the contacts of general practitioners with registered specialists of PHM.
- c) The quality of the service to pig producers, pork production chains, retailers and consumers of pork products by, among other things, the protection of the public against nonqualified "specialists".
- d) The professional satisfaction of veterinarians.
- e) The further development of PHM as a specialisation branch of veterinary science.

The primary objective of the ECPHM shall be to advance health-oriented pig production management at population level in Europe and increase the competency of those who practice in this field by:

- a) Establishing guidelines and standards of training for postgraduate education and experience prerequisite to become a specialist in the speciality of PHM;
- b) Examining and authenticating veterinarians as specialists in PHM to serve health and welfare of the animals, the economic outcome of the pig & pork production, the production of safe quality products for consumers in a sustainable animal production by providing expert care for pigs;
- c) Encouraging research and other contributions to science and practice of PHM including husbandry, reproductive management at herd level, epidemiology, pathogenesis, diagnosis, therapy, prevention, and control of diseases directly or indirectly affecting pigs and the maintenance of healthy and productive pig herds. PHM also includes the impact on quality and safety of pork products and gives special consideration to herd health and production, production systems and targets and the management of pig populations; and
- d) Promoting communication and dissemination of knowledge related to item c) above.

The specialist in Porcine Health Management will be available to work in a referral capacity. At least 24 hours per week of the specialist's time will be devoted to the specialty.

Chapter II of this Training Brochure specifies the admission to the College.

Chapter III of this Training Brochure provides an outline of the objectives, set-up, requirements and contents of, as well as the application procedure to an ECPHM Residency Programme.

Chapter IV of this Training Brochure deals with the procedure for application to sit the certifying Examination.

Chapter V of this Training Brochure is dedicated to the ECPHM certifying Examination.

2 CHAPTER II – Admission to the College

2.1 Requirements to be a Diplomate of the College

The Constitution & Bylaws of the European College of Porcine Health Management (ECPHM) have established the following requirements for an active membership status. The Applicant needs to:

1. Be licensed to practice veterinary medicine in Europe, and obtained veterinary education from an EAEVE approved establishment, unless relieved of this obligation by the Board.
2. Have a good moral and ethical standing in the profession.
3. Practise the specialty for not less than 60 per cent (%) of the specialist's professional time. At least 24 hours per week should be devoted to aspects of Porcine Health Management and related activities such as teaching, research, consulting, and the preparation of publications as part of such activities.
4. Have successfully passed the certifying Examination procedure of the ECPHM as determined by the Examination Committee (see [2.2](#)).

2.2 Qualifications to sit the certifying Examination

Two (2) categories of Exam applicants will be allowed to sit the Examination. Those giving evidence of satisfactory completion of a/an:

- a. Standard Residency Programme (see [2.3](#) and [3](#))
- b. Alternative Residency Programme (see [2.3](#) and [3](#))

In addition, the two (2) categories of Applicants have to submit the following documents as part of the Credentials:

- Three (3) Clinical Case Reports (see detailed in [4.1.5](#))
- Two (2) Porcine Health Management papers (see detailed in [4.1.6](#))

The process how to apply to sit the certifying Examination including a full list of required documents is described in [Chapter IV](#).

2.3 Requirements for entry in the ECPHM Residency Programme

2.3.1 Professional requirements

A veterinarian applying to follow a Residency Programme need to fulfil the requirements 1-3 as stated in section [2.1](#).

Additionally, veterinarians applying to follow a Residency Programme need to have completed an Internship programme or its equivalent as outlined in section [2.3.2](#).

2.3.2 Internship programme

Prospective Residents will be required to have broad training and experience in clinical Porcine Health Management (PHM) and its supporting disciplines, which must be attained by participation in an Internship or its equivalent.

An Internship shall be a flexible rotating clinical training / experience in the respective specialty of veterinary medicine of at least one (1) year beyond the professional degree. It shall provide practical experience in applying knowledge gained during formal professional education, and offers an opportunity for recent graduates to obtain additional training in clinical and basic sciences. An Internship is composed of a broad range of clinical assignments within the specialty. It is important that an Internship is truly a rotation, involving a wide range of clinical activities. It should be conceived as a training programme for the Intern rather than a service benefit for the clinic. The Internship programme preparing for a Residency in PHM should cover all aspects of general swine practice at both the individual and herd level. It should preferably be under the direct supervision of at least one ECPHM Diplomate or an equivalent as defined by the Credentials Committee. The Internship programme 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.

An Example of an equivalent to an Internship programme would be a period of at least one and a half (1.5) years in a specialised pig practice which has not been approved as a training centre beforehand with evidence of significant postgraduate continuing education. It should preferably be under the direct supervision of at least one ECPHM Diplomate or an equivalent, which may not be possible for practice based equivalents.

3 CHAPTER III – ECPHM Residency Programme

An ECPHM Residency Programme is a training programme, including postgraduate education and clinical experience in science and practice, of at least three (3) years allowing a graduate veterinarian (“Resident”) to acquire in-depth knowledge in Porcine Health Management and its supporting disciplines under the supervision and guidance of at least one (or in some circumstances more than one) certified Diplomate of the ECPHM.

In all cases, the Education Committee needs to approve a Residency Programme 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 all areas of Porcine Health Management (PHM) and its supporting disciplines covered by the ECPHM and other EBVS approved European Veterinary Colleges.

3.1 Main objectives

- To promote aptitude and proficiency in all aspects of the practice of PHM, but particularly in the herd context.
- To instruct the Resident in the science and practice of PHM and its supporting disciplines. This may be recognised by the award of an advanced university degree such as Master’s or Ph.D., and constituent modules of relevance to the training of other European Veterinary Colleges.
- To provide the Resident with the opportunity to pursue career goals in teaching, research, clinical service, and/or specialist practice.

3.2 Specific objectives

3.2.1 Concerning practicing the speciality

The future Diplomate should be able to:

- Recognise and work-up problems related to all aspects of the speciality;
- 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 swine under the specialists care, the swine livestock sector, animal welfare, swine owners/clients, colleagues, the consumer of products originating from swine, the public in general and the environment;
- Contribute to the development and application of concepts and methods in herd health management and livestock production;
- Handle emergencies in swine practice;
- Perform diagnostic and therapeutic procedures in swine;
- Establish indications for laboratory diagnostic support, perform laboratory diagnostic procedures (e.g. gross pathology) and/or interpret the outcome (e.g. of virological,

parasitological, bacteriological, histopathological and serological examinations), take actions and give advice on the basis of knowledge of herd health and preventive medicine, zoonoses, nutrition and housing and environment;

- Recognise new developments in the specialty;
- Be aware of current EU and national regulations with regard to all aspects of porcine health, production, food safety and welfare;
- Contribute to the development and application of concepts, methods and clinical practice in porcine health and herd health management.

3.2.2 Concerning transfer of knowledge

The future Diplomate should be able to:

- Express thoughts clearly, in both oral and written form;
- Approach herd and individual animal problems in an analytical and scientific way to find solutions and be able to assign priorities for these;
- Organise all aspects of the specialists work efficiently and effectively;
- Find required information quickly;
- Develop clinical and scientific activities in order to contribute to the development of the specialty.

3.2.3 Concerning working as a professional specialist

The future Diplomate should be able to:

- Keep abreast of new developments in- and outside the specialty and become familiar with new methods, before applying these in the practice of PHM;
- Understand the limitations of the specialists own specialty;
- Understand the possibilities that other specialties may have to offer;
- Be familiar with the potential of multidisciplinary co-operation;
- Develop self-confidence, self-criticism and sense of responsibility that are essential for the practice of the specialty;
- Have a high moral and ethical standard with regard to the specialists contribution to the protection of pig health and welfare, human health and the environment.

3.3 General set-up, timelines and terms

3.3.1 Administrative framework

Each Residency Programme has a Programme Director. The Programme Director has to be a certified Diplomate of the ECPHM and is responsible for the administration and continuity of the Residency Programme. The Programme Director will assign a Resident Supervisor to each Resident.

The Resident Supervisor has to be a certified Diplomate of the ECPHM. The Supervisor is responsible for the administration and evaluation of the general and specific programme requirements for each Resident under supervision. Each Supervisor may train up to two (2) Residents concurrently, while under certain circumstances up to three (3) Residents may be trained by the Resident Supervisor concurrently for a limited time.

The Programme Director and Resident Supervisor may be the same individual.

At each institution or practice involved in the Residency Programme, a Resident should have a Supervisor, thus in addition to the primary Resident Supervisor, a Co-supervisor may be assigned if needed. A Co-supervisor should be a certified Diplomate of the ECPHM, a Diplomate of another EBVS approved European Veterinary College (EBVS-recognised specialist), or an equivalent (non-EBVS-recognised specialist). An equivalent is a person whose excellence using documentation or proofs of clinical experience, publications, teaching, training programs and certifications is approved by the Credentials Committee. Such person has to pass the College's re-approval process every five (5) years. In addition, a Diplomate of another EBVS approved European Veterinary College or a non-EBVS-recognised specialist could act only as a Co-supervisor, and a Diplomate of the ECPHM should always be responsible for the Residency Programme.

Additional experts in PHM and its supporting disciplines may be included in the Residency Programme as Advisors. An additional expert is considered as an Advisor within a Residency Programme, if this expert is primarily or exclusively responsible for the training with regard to specific content of the ECPHM Residency Programme (see 3.5). An Advisor should be a certified Diplomate of the ECPHM, a Diplomate of another EBVS approved European Veterinary College (EBVS-recognised specialist), or an equivalent (non-EBVS-recognised specialist). An equivalent is a person whose excellence using documentation or proofs of clinical experience, publications, teaching, training programs and certifications is approved by the Credentials Committee. Such person has to pass the College's re-approval process every five (5) years.

3.3.2 Training institution and type of Residency

There shall be no restriction on training institutions / approved practices as long as they meet the requirements for an approved Residency Programme 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 and gain experience into all aspects of the specialty.

Standard and Alternative Residency Programmes can be distinguished.

A **Standard Residency Programme** is a training programme set-up by a specific institution and approved by the Education Committee, independent of a Residency Applicant.

Veterinarians, who fulfil requirements as listed in section [2.3](#) may apply to follow a specific Standard Residency Programme.

A veterinarian, who fulfils requirements as listed in section [2.3](#), but whose circumstances do not permit enrolment in a Standard Residency Programme may submit an **Alternative Residency Programme** to the ECPHM, in conjunction with the Supervisor, outlining the resources available to them, for advanced study, research and experience. The Alternative Programme is not approved for anyone other than the Resident in question and must be approved by the Education Committee before the start of the training.

Standard Programmes are bound to an institution, while Alternative Programmes are bound to an individual Resident. Any changes in conflict to this (e.g. a Resident following a Standard Programme changing institutions) will require a new application.

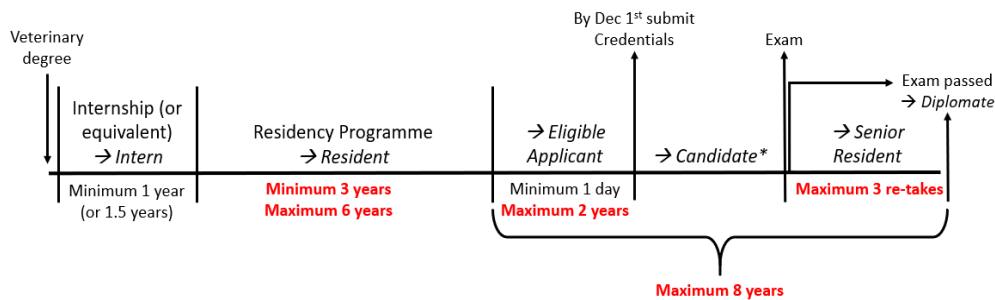
3.3.3 Timelines

The minimal length of any Residency Programme is three (3) years for a total time devoted to the speciality not being less than 60 % based on a 40 hour working week. The period can be taken consecutively or on a part-time basis as long as the total time approximates to three (3) years and the total period does not exceed six (6) years. These timelines are effective for Residents who started their Residency on June 7th, 2016, or later (before this date minimum and maximum length of a Residency Programme was set at two and a half (2.5) and seven (7) years, respectively).

Each Resident follows a Residency Programme of a specific length with a designated start and end date. The starting date of a Residency Programme is the expected starting date, as reported in the Resident application form, conditional to approval of the application by the Credentials Committee within 30 days after the submission. The date of approval will be considered as start date of the Residency in case revisions to the application are needed beyond the 30th day after first submission. Approval of the Alternative Residency Programme is mandatory before the Applicant embarks on it. Thus, the date of approval will be considered as start date of the Alternative Residency Programme.

In case of parental leave, illness or any other exceptional circumstances leading to a discontinuity or deviation from the approved timelines of a Residency, the Resident has to notify the Credentials Committee in writing as soon as possible. Notification can be carried out by the Resident Supervisor or Programme Director on behalf of the Resident. In case of exceptional circumstances, it is the Credentials Committee that considers the nature and legitimacy to decide upon extension of the Residency. In case of parental leave, illness or exceptional circumstances a prolongation of the maximum length of a Residency beyond six (6) years is possible.

Further timelines are documented in other sections of this Training Brochure. Figure 1 provides an overview. Minimum time periods need to be completed before being eligible to apply for the next step. Violating maximum time periods leads to disqualification from the programme.



*if credentials are accepted

Figure 1: Overview of terms and timelines. (Note: timelines are effective for Residents who started their Residency on May 3rd, 2017, or later. Before May 3rd, 2017, no deadline for 1st submission of Credentials was in place; Before June 7th, 2016, minimum and maximum length of a Residency was 2.5 and 7 years, respectively).

3.3.4 Definitions of terms

- **Resident** is a graduated veterinarian, who has been approved by the Credentials Committee, and is currently following a Residency Programme, which has been approved by the Education Committee.
- **Eligible Applicant** is a former Resident, who has completed a Residency Programme, but has not yet submitted the Credentials to sit the certifying Examination.
- **Applicant** is an Eligible Applicant who applied to sit the certifying Examination and once the application has been accepted becomes a **Candidate**.
- **Candidate** is a former Resident who is approved to sit the certifying Examination by the Credentials Committee. A Candidate, who successfully passes the Exam (and fulfils other requirements listed in [2.1](#) and [2.2](#)) becomes a **Diplomate**.
- **Senior Resident** is a graduated veterinarian, who has completed a Residency Programme, has sat the Exam, but has not yet passed the Exam. The Senior Resident becomes an Applicant / Candidate again upon application submission / approval to sit the certifying Exam.
- **Programme Director** is a certified Diplomate of the ECPHM and is responsible for the administration and continuity of the Residency Programme.
- **Resident Supervisor** is a certified Diplomate of the ECPHM. The Supervisor is responsible for the administration and evaluation of the general and specific programme requirements for each Resident under supervision.
- **Co-supervisor(s)** is assigned at each additional institution or practice involved in the Residency Programme, so that the programme is supervised at every institution or practice involved. See detailed requirements in section [3.3.1](#).
- **Advisors** are additional experts in PHM and its supporting disciplines, which may be included in the training programme to assure proper training in all areas of PHM. See detailed requirements in section [3.3.1](#).

3.4 Total time requirements for specific parts of the ECPHM Residency Programme

3.4.1 Pig herd health management practice

1. Residents must spend minimum 25 % to maximum 70 % of the Residency Programme in PHM practice under the direction of a certified Diplomate of the ECPHM or an equivalent as approved by the Credentials Committee, for a total time devoted to the speciality not being less than 60 % based on a 40 hour working week.
2. The Resident must spend 5 % of the Residency Programme with a certified Diplomate of ECPHM or an equivalent as approved by the Credentials Committee to gain a training in post-mortem techniques, sample collection, sample packaging / transport, processing in the laboratory including routine diagnostic methods, evaluating pathological and serological findings, rudimentary toxicology and an understanding of all relevant terminology and nomenclature. Residents should attend pathological conferences and/or seminars, even if material being discussed does not always originate from pigs. This pathological training is required to teach the Resident more about the activities of veterinary pathology and associated laboratory work and how to work with the pathologist when investigating problems in the field. Participation, discussion and observation within pathology training should lead to a deeper appreciation and understanding of the teamwork required by the pathologist, laboratory personnel and the specialist in PHM.

3.4.2 Academic training

Residents must spend minimum 25 % to maximum 70 % of the Residency Programme, for a total time devoted to the speciality not being less than 60 % based on a 40 hour working week in following ways:

1. Research and publications:
 - Research project(s): the Resident must complete at least one full or part-time investigative project that contributes to the advancement of PHM over a period of at least 12 months. This may be part of graduate degree studies. This may produce some of the materials for two (2) peer-reviewed PHM papers, which are required as part of the Credentials to apply to sit the certifying Exam.
 - Case summaries and publications to be produced by all Residents:
 - A minimum of three (3) Case Reports related to PHM, personally handled, which give an impression of the analytical approach of the Candidate in at least three different scenarios. Individual and population cases are acceptable in all practice categories. Case Reports that are original research or only a literature review of a topic are unacceptable.

- Two (2) PHM papers (at least two peer-reviewed publications in international refereed journals, which may be original research papers, short communications or clinical case reports) as the first author in journals included in the ISI list of Thomson Reuters or in other peer-reviewed journals not included in the ISI list but complying with 1) international review board, 2) distribution in different countries and 3) published with at least an English abstract. Peer-reviewed PHM papers fulfilling the above mentioned criteria and published up to five (5) years prior to the start of the Residency until latest two (2) years after completion of the Residency Programme are accepted.

2. Seminar and teaching responsibilities:

- Seminar requirement: the Resident must present a minimum of 6 seminars during the Residency Programme. Definition of seminar: a scientific presentation, which is followed by a discussion period, the total time being at least 45 minutes.
- Resident's conference presentations: the Resident must regularly present cases at PHM Resident's conferences or comparable meetings. During the period of the Residency at least one presentation should be given at a national or international scientific or professional meeting / conference.
- 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 per year, for Candidates following Standard and Alternative Residency Programmes.

3. Continuing education: continuing education programmes, 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 programme.

4. 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 PHM conferences during the Residency Programme. Attendance at other scientific presentations, including conferences on other livestock species is also encouraged, as is attendance at courses in the area of PHM. Many different organisations and institutions have been identified that already provide such courses, meetings and programmes.

3.5 Contents of the ECPHM Residency Programme

The resident should gain an in-depth and detailed knowledge (unless otherwise stated) of the following areas of PHM and its supporting disciplines. The areas of overlap with associated disciplines should be taught by either a Diplomate of the Colleges concerned or an equivalent who needs to be approved as an Advisor by the Credentials Committee (see section 3.3.1).

It is not possible to be prescriptive regarding the exact quantity of training required in specific disciplines as each training 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 programme. For Example, with regard to swine nutrition the Resident should spend approximately 1-2 months in attending nutritional conferences and courses or working with a swine nutritionist. In the case of swine reproduction, a Resident would be expected to spend the equivalent of 2-3 months working in applied swine reproduction under the supervision of an ECAR Diplomate (approved for the ECAR sub-field Porcine Reproduction and Herd Health) or an equivalent as defined / approved by the Credentials Committee. In addition, a Resident must obtain theoretical knowledge of the physiology and pathology of swine reproduction through seminars and lectures or by attending scientific conferences. The amount of time spent in seminars, lectures and conferences related to reproduction is expected to be at least 40 hours.

3.5.1 Infectious and non-infectious diseases

Viral, bacterial and parasitic diseases and syndromes of swine which are commonly encountered in Europe, including their aetiology, epidemiology, prevalence, pathology, differential diagnosis, diagnosis, treatment, control and prevention.

General herd health management issues.

Zoonoses; epidemiology, pathology, clinical signs, diagnosis, differential diagnosis, treatment and control.

Diagnostic methods (at individual and herd levels) including clinical Examination, case recording, post-mortem Examination, collection and preservation of samples for laboratory Examination, routine diagnostic laboratory techniques, interpretation of the results of serological, virological and bacteriological Examinations.

Immunity and vaccination used to prevent infectious disease at the herd and population level.

Biosecurity and infectious/non-infectious disease control methods on pig units and within the pig and pork industry in its widest context.

Notifiable diseases of swine and all related appropriate legislation at the level of the EU.

3.5.2 Reproduction

Normal and abnormal reproductive behaviour, artificial control of reproduction, husbandry aspects of reproduction, principles of boar usage and sow management, the effects of nutrition on reproduction, pregnancy diagnosis and examination of the reproductive tract and foetus, diseases of the reproductive tract and their treatment, factors influencing oestrous detection rate, infertility in the sow, problems during pregnancy, normal parturition and basic obstetrical procedures, common causes of reduced herd reproductive performance, recording reproduction data, methods for investigation and correcting lowered reproductive performance, interpretation of records, organisation of fertility control schemes, an understanding of the principles of AI, infertility in the boar and clinical examination, competent use of ultrasonography for reproductive examination. Residents should be competent to advise or implement reproductive herd health policies and have a basic understanding of modern reproductive technologies. However they need not have specific specialist expertise in modern reproductive technologies such as embryo transfer and associated techniques.

3.5.3 Epidemiology

The application of epidemiological principles, basic methods and techniques. Examples: measures of disease occurrence and association, sampling methods, surveillance and diagnostic test evaluation, measures of association between exposures and outcomes, validity and understanding bias, confounding and interaction, multivariable analysis in epidemiology, quality assurance and control, reporting, application and communication of epidemiological results, epidemiology and veterinary public health, emerging and re-emerging diseases, epidemiological and statistical tools and disease modelling, molecular epidemiology, risk assessment in herd health programmes on an international, national, multiple herd and individual herd basis, export and import rules and regulation both within Europe and with countries outside Europe, etc.

A basic working knowledge of biostatistics.

Awareness of information and communication technology, data-handling and the use of computer technology in herd health programmes.

3.5.4 Animal production

3.5.4.1 Economics

Structure and economics of the European pig and pork industry. Animal health economics as applicable to pig units and pig populations. Pig markets and pig marketing.

3.5.4.2 Genetics

Genetic improvement of stock, heritability of characteristics, selection for specific characteristics, breeding programmes, economic assessment of genetic gain, national and

international testing of progeny performance and other methods of genetic evaluation, hereditary and congenital diseases.

3.5.4.3 Housing

Production systems: a detailed knowledge of all aspects of commonly used production systems. Pig housing and its impact on health, animal welfare and disease for all classes of pigs.

3.5.4.4 Nutrition

Anatomy, physiology and principles of normal digestion, methods of feed analysis, an understanding of principles of diet formulation, nutritional requirements of swine 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.

3.5.5 Animal welfare and ethics

Welfare and ethics: normal behavioural patterns and their alteration by stress, pain and disease, pain recognition and assessment, welfare in relation to stockmanship, housing, nutrition and breeding, welfare standards on the farm, during transport and at the slaughterhouse. Care and welfare of sick and injured pigs, slaughtering and transport methods, impact of biotechnology on welfare, EU legislation.

3.5.6 Food safety

Pre-harvest food safety measures (Salmonella control, Trichinella and Toxoplasma control, prudent use of antibiotics etc.), meat inspection data and slaughter checks. Herd Health Planning and Quality Assurance Schemes.

3.5.7 Drugs

Therapeutics and medicines control, prudent use of antibiotics. Clinical trials. EU medicine legislation. The administration of medicines and their strategic use in herd health management programmes.

3.5.8 Surgery and anaesthesia

A basic knowledge of common methods and procedures is required but not specialist knowledge or expertise.

3.5.9 Reporting and communication

Scientific writing and the presentation of reports from investigations in the scientific literature. Report writing for clients. Communication skills.

3.6 Documentation & Verification of a ECPHM Residency Programme

The Programme Director, Resident Supervisor and Resident have responsibilities for documentation and verification of satisfactory training for each Resident. In case of changes of the Programme Director or Resident Supervisor(s) of an approved Residency Programme, the Education Committee needs to be informed immediately by the (new) Programme Director.

A. The Programme Director is responsible for:

1. Verification of pre-Residency training and presence of suitable PHM facilities, equipment, and supplies within 30-days of programme initiation.
2. Distribution of the documentation and verification forms to each Resident annually.

B. The Resident Supervisor is responsible for:

1. Verification of annual progress and performance evaluations.
2. Verification of the Resident Activity Log.
3. Verification of the Resident Dossier.
4. Stimulation and facilitation of interdisciplinary contacts and co-operation where appropriate.
5. Keeping an annual report on the Resident based on the items B1 to B3, signed by both the Resident and the Resident Supervisor.
6. Evaluation of the Resident's progress and communication of deficiencies to the Resident. In case of structural deficiencies the Education Committee will be notified by the Resident Supervisor or the Resident.

C. The Resident is responsible for:

1. Maintenance of the Resident Activity Log (indicating training steps, results achieved, service provided, instructions completed).
2. 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).
3. Providing annually updated curriculum vitae to the Resident Supervisor and Programme Director.
4. Submission of the annual self-evaluation form (see www.ECPHM.org) to the Resident Supervisor and Programme Director for verification.
5. Sending the verified annual self-evaluation form (see www.ECPHM.org) to the chair of the Education Committee by January 31st of each year. In case of any changes of the Resident Supervisor and/or Programme Director an additional self-evaluation form should be send.
6. Notifying the Credentials Committee on parental leave, illness or any other exceptional circumstances leading to a discontinuity or deviation from the approved timelines of a Residency.

3.7 Facilities, services & equipment required in a ECPHM Residency Programme.

- A. Library: a library containing recent textbooks and current journals relating to PHM and its supporting disciplines must be accessible to the Resident.
- B. Access to swine herd health cases.
- C. Records: a complete record must be maintained for each case and those records must be retrievable.
- D. Computer facilities: up-to-date computer facilities with access to the Internet and relevant software including herd health programs and automated literature search systems.
- E. Pathology: an appropriate room for pathological examination must be available. Anatomic pathology reports must be retained and retrievable.

3.8 Application procedure for Residency Programmes

Veterinarians fulfilling requirements outlined in section [2.3](#), are invited to submit the completed and signed application form as available on www.ECPHM.org.

In case of a **Standard Residency Programme** the training programme is set-up and approved for a specific institution, independent of an Applicant. Information provided in [Chapter III](#) should be consulted. Necessary forms are available on www.ECPHM.org. Such approved institutional Residency Programmes have to pass the College's re-approval process every five (5) years. A list of approved institutional (Standard) Residency Programmes is available on www.ECPHM.org. A veterinarian applying to follow a Standard Programme needs to submit the respective application form together with a certificate of Internship if applicable.

In case of an **Alternative Residency Programme** a detailed outline of the individual training programme has to be submitted together with the respective application form. The application form and a template for an Alternative Programme outline is available on www.ECPHM.org. Information provided in [Chapter III](#) should be consulted. An Alternative Programme is approved only for the Applicant in question.

All correspondence regarding the application to follow a Residency should be addressed to the Credentials Committee and the Secretary. Thus, also in the case of an Alternative Programme the training outline is submitted to the Credentials Committee.

All correspondence regarding an institutional Residency Programme should be addressed to the Education Committee and the Secretary.

4 CHAPTER IV – Application for the ECPHM Examination

The responsibility for evaluating a Candidate's eligibility to sit the Examination and the quality of the publications rests with the Credentials Committee.

Applicants must submit their Credentials to the Secretary and the Credentials Committee **on or before December 1st** of the year preceding the year of the anticipated Examination. The Residency Programme has to be completed at the time of application (i.e. 30th of November)! The requirements and qualifications described in section 2.1 (items 1-3) and 2.2, must be met at the time the application is made.

Eligible Applicants may submit their Credentials for approval to sit the certifying Examination no later than two (2) years after the completion of the Residency Programme when the Residency started on May 3rd, 2017, or later (before this date, no deadline for 1st submission of Credentials was in place). If they do not apply for the Exam within two (2) years after completion of the Residency they no longer have any status or role and are not eligible for participation in ECPHM activities.

Residents can request to take the oral part of the Exam during the third (3rd) year of their Residency. To this end, Residents are eligible to submit three (3) clinical Case Reports after the second (2nd) year of their Residency (please consult the application form for certification by Examination available on www.ECPHM.org for details on Credentials). However, application for sitting the written parts of the Exam can only be done after completion of the Residency Programme.

All Candidates must submit the application form for certification by Examination of the College available on www.ECPHM.org together with other required documents (see 4.1), the Credentials evaluation fee must be paid (see 4.3.1) and the Supervisor(s) have to submit a letter(s) of reference as described in section 4.2. The Credentials must verify the successful completion of a Standard or Alternative Residency Programme.

The responsibility for accuracy and availability of all required Credentials rests with the Applicant. **Late or incomplete applications will not be processed or reviewed.**

4.1 Documentation

The following completed and verified documentation must be submitted as Credentials in **only one PDF-document containing everything**, send by E-Mail to the Secretary and the chair of the Credentials Committee. The following six categories of material must be arranged in the sequence listed.

4.1.1 Application Form for Certification by Examination

The valid form is available on www.ECPHM.org. The form needs to be completed and signed.

4.1.2 Curriculum vitae

The CV should follow the following format:

NAME

ADDRESS

GENDER AND 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

4.1.3 Activity Log Book

Applying for those having followed a Residency Programme. The log book should indicate training steps, results achieved, services provided, and instructions completed. The log book may be based on the format of the Resident self-evaluation form (see www.ECPHM.org), but should summarize the full period of the Residency (i.e. three years or more).

4.1.4 Correspondence

Correspondence pertinent to document communication on discontinuity or deviation from the approved timelines of a Residency Programme or exceptional circumstances with regards to the Exam application need to be provided as part of the Credentials. If no changes of the approved Residency occurred, no correspondence has to be submitted.

4.1.5 Case Reports

Three (3) Case Reports related to PHM personally handled, which give an impression of the analytical approach of the Candidate in at least three different scenarios have to be submitted as part of the Credentials. Individual and population cases are acceptable in all practice categories. Case Reports that are original research or only a literature review of a topic are unacceptable.

Case Reports submitted as part of the Credentials to sit the certifying Examination need to be written following strictly the respective guidelines (see www.ECPHM.org). Those Case Reports must not cover the same materials as used in peer-reviewed PHM papers submitted as part of the Credentials. Meaning the same clinical case cannot be used as a subject twice, in a Case Report prepared for the certifying Examination and in a peer-reviewed publication submitted as part of the Credentials. Clinical cases resulting in a Case Report prepared for the certifying Examination must be worked on during the Residency under the supervision of the Resident Supervisor.

4.1.6 Reprints of Porcine Health Management papers

Two (2) PHM papers fulfilling the criteria described in [3.4.2](#) have to be submitted as part of the Credentials. The manuscripts of those PHM papers have to be **at least submitted when applying to sit the certifying Examination and when sitting the Exam**. In any case acceptance for publication of the papers needs to be concluded within two (2) years after completion of the Residency Programme and before one can be entitled a Diplomate ECPHM and certification as European Veterinary Specialist in PHM can be issued.

4.2 Letters of reference

There must be a letter of reference from the Supervisor(s) (Primary Supervisor and Co-supervisor(s) if applicable) at each institution or practice involved in the Residency Programme. All letters must be from persons familiar with the Candidate's post-graduate training programme and mailed directly to the Secretary by each referee. **These confidential letters are NOT to be forwarded by the Applicant**. Requests by the Applicant for reference letters from Supervisor(s) should be made early as to assure arrival with the Secretary on or before the application date (i.e. December 1st). 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 Residency Programme 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 ECPHM.
- d. The moral and ethical standing of the Applicant within the veterinary profession.

4.3 Evaluation of Credentials

4.3.1 Credentials evaluation fee

- a. The application will not be processed or evaluated without the Credentials 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 full Credentials to sit the final exam and partial evaluation for Residents applying for the oral Exam only after the 2nd year of Residency are published on the college's website. The fee may be changed at the discretion of the Board.

4.3.2 Evaluation process

The Credentials Committee will notify the Applicant(s) about the evaluation result no later than six (6) weeks after the deadline of submission of the Credentials. If the Credentials are accepted by the Credentials Committee the chair will notify the Applicant and the Examination Committee. The Examination Committee will notify successful Applicants (now Candidates) of the dates and procedure of Examination.

Unsuccessful Applicants will be notified by a letter explaining the deficiencies in their Credentials. A subsequent re-application must include resubmission of all Credentials including a written outline of the Applicant's self-evaluation of the Applicant's 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 are only minor or technical deficiencies in the Credentials the Credentials Committee may invite a re-application of the Credentials by February 1st of the year of the anticipated Examination subject to the payment of another evaluation fee. Under these circumstances Applicants will be informed of the Credentials Committees decision latest by mid-February.

All correspondence regarding application procedure and notification should be addressed to the Secretary and the Credentials Committee. All submitted application materials become the sole property of the ECPHM and will not be returned to the Applicant.

5 CHAPTER V – ECPHM certifying Examination

5.1 Examination fee

- a. The Candidate is only allowed to take the Examination if the Examination fee has been paid prior to the Examination.
- 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 Examination Committee).
- c. The Examination fee for the certifying Examination is published on the college's website. The fees may be changed at the discretion of the Board.

5.2 Certifying Examination

The certifying Examination is organized annually. The Examination will be organized as a physical event, while under exceptional circumstances it may take place virtually. Date and place will be published by the Examination Committee latest by 1st of October of the year preceding the year of the Exam. Candidates will receive detailed information by the Examination Committee upon approval of their Credentials.

The Examination process of the ECPHM is intended to identify and certify specialists of the highest order in the veterinary field of Porcine Health Management. To this end, multiple choice questions are used to define the **breadth** of knowledge, written answers are used to define the **depth and understanding** of knowledge, and case management questions are used to define the **problem-solving skills** of Candidates. All Diplomates of the ECPHM need a sound working knowledge of general swine veterinary practice skills as well as the specialist skills attributable to the discipline of Porcine Health Management in the herd context. The Examination is intended to assure that members of the College have the required level of knowledge in the discipline that is on a level equal to, or better than, any other specialist qualification in this (or closely related) fields world-wide.

While it is not intended that English language skills should provide an unfair advantage, successful Candidates are likely to be sufficiently proficient in English to be able to read, write, and understand veterinary publications and Examination questions written in that language.

The Examination will test all aspects of Porcine Health Management and is composed of two parts:

1. The written Examination consists of three parts: (i) multiple-choice questions with one correct answer (MCQ), (ii) short and long essay questions (EQ), and (iii) problem solving and data assessment exercises (PSE). The total time of the written Examination should not exceed 9 hours approximately. Example questions, when available, will be provided to every Candidate after Credentials are approved. A (non-medical) dictionary is allowed to help with language problems.

2. The second section of the Examination will examine case management covering any aspect of Porcine Health Management. This will be undertaken as an Oral presentation of one practical case in a classroom after which the Examination Committee members are discussing the case together with the Candidate not exceeding one hour. The practical section of the Examination is designed to test problem solving capabilities and skills as well as practical skills. The submitted work elements (Case Reports and publications) may be examined in this section, the relevant submissions having been made available to the Examination Committee in advance.

The minimum acceptable standard to achieve a pass in the certifying Examination will be defined by the Examinations Committee and ratified by the Board of the College.

The Chair of the Examination Committee will forward details of Candidates' results to the President. The results of the Examination will be forwarded to Candidates, in writing, within 14 days of the completion of the Examination. The result of the Examination is announced to all Candidates on the same date. In cases where a Candidate fails to satisfy the Examination Committee and has not reached the required standard a comprehensive written examiners report will also be provided to the Candidate to aid preparation for future Examination attempts. Candidates who fail the Examination will be informed about the individual performance in every part of the Examination. They will further receive feedback about deficiencies in knowledge, skills and competencies that did not meet the requirements in the ECPHM Examination.

A Candidate **must pass all parts of the Examination within eight (8) years of completion of the Residency Programme**. The number of re-applications to sit the Examination is limited to three (**four attempts in total**). Examinations are organized annually.

A Candidate **must pass the overall threshold score of 60 %** as present by the Examination committee, based on the Angoff procedure. In addition, to pass the Exam, a Candidate needs to achieve **at least 50% of the points in all parts of the Exam**, as specified in the bylaws. So, if a Candidate has less than 50% of the points in a specific part of the Exam, the Candidate fails even if exceeding the required overall Exam threshold score of 60 %.

5.3 Repeat Examinations

Candidates repeating the Examination are required to undertake and satisfactorily complete the Exam application process again. Additional periods of training and/or experience may be required by the Credentials Committee.

Re-application Credentials must include:

- a. A written outline of the re-Applicant's remedy to correct the deficiencies identified previously as noted by the report from the Credentials and/or Examination Committee.

- b. All sections required for the initial Credentials evaluation suitably updated. In case the oral part of the Exam has to be re-taken, one (1) new Case Report has to replace the one presented in the Oral part of the previous Exam.
- c. A list of all dates of previous applications for Credentials approval and dates of Examination attempts.