

**EUROPEAN COLLEGE OF
SMALL RUMINANT
HEALTH MANAGEMENT
(ECSRHM)**

TRAINING PROVISIONS

December 2020

CHAPTER I

Introduction

The European College of Small Ruminant Health Management (ECSRHM) is a veterinary speciality organisation approved by the European Board of Veterinary Specialisation (EBVS). The ECSRHM has been founded after an initiative of a group of European veterinarians, already recognised nationally and internationally as specialists in the field of small ruminant health management, and in response to a growing demand for better veterinary services for small ruminant flocks/herds and the need to harmonise postgraduate training in the field.

Diplomates of the ECSRHM will have a proven and thorough knowledge and experience in a) all aspects of health management for small ruminant populations, b) production management, c) all veterinary aspects of quality and safety of products from small ruminants and d) minimizing the risk of transmitting zoonotic diseases by small ruminants.

As stated in the Constitution of the ECSRHM, its objective is the advancement of veterinary knowledge in the field of small ruminant (sheep, goats) health management by:

- a) Acting as an institution to qualify members of the veterinary profession as specialists in small ruminant health management by establishing and defining the standard of qualification based on evidence-based medicine (EBM);
- b) Developing graduate teaching programs in small ruminant health management;
- c) Developing and supervising EBM continuing education programs for veterinarians interested in small ruminant health management;
- d) Encouraging its members to pursue original investigations and to contribute to the scientific literature;
- e) Defining and describing the veterinary speciality of small ruminant health management;
- f) Supervising the professional activities of its members and ensuring that such professional activities are guided by EBM;
- g) Promoting co-operation with national veterinary associations, farmers' associations, government institutions and international agencies.

These objectives will be achieved by the following means.

- a) By establishing guidelines and standards of training for postgraduate education and experience, prerequisite to achieving specialist status in small ruminant health management.
- b) By examining and certifying veterinarians as specialists in small ruminant health management, who will serve the health and welfare of the animals, improve the economic outcome of flocks/herds and supervise the production of safe quality products for consumers in a sustainable animal production, by providing expert veterinary care for small ruminants.
- c) By encouraging research and contribution to the science and practice of small ruminant health management -including husbandry, internal medicine, surgery, obstetrics and reproductive management, as they relate to the epidemiology, pathogenesis, diagnosis, therapy, prevention and control of diseases, directly or indirectly affecting small ruminants, for the individual patient or the flock/herd- as well as the maintenance of healthy and productive flocks/herds. Small Ruminant Health Management also includes, at the level of the animal, the impact on quality and safety of products obtained from small ruminants for human consumption or use, as well as minimizing the risk of transmitting zoonoses by small ruminants. The discipline provides special consideration for flock/herd health management, for production systems and targets and for the management of small ruminant populations.
- d) By promoting communication and dissemination of knowledge in the field of Small Ruminant Health Management.

Diplomates in Small Ruminant Health Management are able to work in a referral capacity. At least 60 per cent of their professional time (i.e., at least 24 hours a week) is devoted to the speciality.

Chapter II of these training provisions indicates the requirements for admission to the ECSRHM. Chapter III provides an outline of the objectives and the training program for potential Diplomates in Small Ruminant Health Management. Chapter IV deals with the application procedure for the ECSRHM examination. Chapter V is dedicated to the certifying examination.

These provisions must be evaluated every three years by the Credentials Committee, the Examination Committee and the Education Committee of the College. These will suggest modifications to the Board of the College, which will adopt or reject them by a majority vote.

CHAPTER II

Requirements for admission to the College

Based on the Constitution and the Bylaws of the European College of Small Ruminant Health Management (ECSRHM), in order to qualify for membership as a Diplomate, veterinarians shall meet all the following criteria:

- a) Have a good moral and ethical standing in the veterinary profession;
- b) Practice veterinary medicine in a European country or be entitled to obtain a licence for practicing in Europe (unless this obligation is waived by the Board of the College);
- c) Have successfully passed the certifying examination procedure of the College.

Qualifications to sit the certifying examination

Requirements to sit for the certifying examination include the satisfactory completion of either a standard residency or an alternative training program dedicated mainly to special education in small ruminant health management. During that, the candidate is expected to acquire a solid background small ruminant health management. Evidence of having completed a standard residency program or an alternative training program must be provided by the date of application deadline.

1) Veterinarians having completed a standard residency program

A standard residency program should be preceded by an initial period of one (1) year in farm animal (ruminants) internship or its equivalent, as defined by the Education Committee. In this context, the internship may take place in a specialist training centre, e.g., a university clinical department) and/or in a veterinary practice with significant farm animal (ruminants) work component or rotating between two specialist training centres. An accepted equivalent to this scheme would be a similar period of at least two (2) years of work at a veterinary practice with significant farm animal (ruminants) work component with simultaneous postgraduate continuing education.

A subsequent period of three (3) years must be in residency training in small ruminant health management under the direct supervision of at least one Diplomate of the College. This period must be taken continuously, on a full-time basis.

Every year, the supervisor should prepare a letter of evaluation electronically confirming satisfactory progress of the resident and send it to the Secretary of the College, who forwards it to the Education Committee. This report will state the objectives of the residency and describe how the programme meets those objectives and the standards established by the College. Finally, the supervisor should prepare a letter confirming satisfactory completion of the prescribed period.

The Education Committee will review the evaluation reports. Each member of the committee will report in writing to the chairperson of the committee any deficiency found in the report.

The Chairperson of the Education Committee will write to the Supervisor of the residency, requesting clarification of any points that are unclear and further information on any apparent deficiencies. If there are issues that remain she/he will write to the Dean or Head of the Veterinary School or the chief executive officer of any other institution within which the residency programme is being conducted, with a copy to the supervisor of the residency.

The committee will meet and consider all the available information about the residency programme, and develop a recommendation for action by the College. The College will approve or disapprove continuation of the residency.

Only veterinarians who have graduated from EAEVE-approved veterinary educational establishments, can be accepted for a residency training period. The Credentials Committee is empowered to waive this requirement in the case of candidates with high qualifications, relevant and supportive to their subsequent residency training.

For the purposes of the residency training described here above, there are no restrictions on specialist training centres or veterinary practices with significant small ruminant work component, as long as these meet the requirements for approved residency agreed upon by the Education Committee. Residents (i.e., veterinarians undertaking the postgraduate training program) are encouraged to gain experience in more than one specialist training centre or veterinary practices with significant small ruminant work component during the period of their residency training, in order to attend a wide clinical caseload and gain experience into all aspects of the speciality.

2) Veterinarians having completed an alternative training program

Veterinarians whose circumstances do not permit enrolment in a standard residency program may submit a proposal for an alternative program to the College in conjunction with her/his proposed supervisor, outlining the resources available to them for advanced study and experience. An alternative program is specific to each resident and is not approved for anyone other than the specific resident. Such a program must be approved by the College before a resident starts her/his training based on that program.

An alternative training program may involve working in a veterinary practice with significant small ruminant work component under the overall supervision of a Diplomate of the College, at the same time undertaking a series of pre-determined specialist training modules provided by external institutions or organisations.

An alternative training program should be preceded by an initial period of one (1) year in rotating internship or its equivalent, as defined by the Education Committee (details as above). An accepted equivalent to this scheme would be a similar period of at least two (2) years of work at a veterinary practice with significant farm animal (ruminants) work component with simultaneous postgraduate continuing education.

The Education Committee should approve an alternative training program before it starts. An alternative training program should be comparable to a three (3)-year full-time postgraduate training period; the total period should last no more than seven (7) years. The program must take place under the overall supervision of a Diplomate of the College.

In the above cases, the Education Committee approves the training program of each institution or the individual alternative training programs, in consultation where necessary with the Credentials Committee. In undertaking this process, the Education Committee will take due care of the required level of training in areas overlapping between related specialities, covered by other EBVS approved European Veterinary Speciality Colleges. Training in these areas of overlapping should be carried out by either a Diplomate of the appropriate College or else by a person equivalent to that, as defined by the Credentials Committee of the ECSRHM.

General guidelines on training requirements for standard residency and alternative training programs are available from the Education Committee.

The supervisor, the training program and the training centre(s) must have been approved before the resident starts the training program.

In all cases and in keeping with the constitutional objectives of the ECSRHM, all persons applying to sit the examination should have made a significant contribution to small ruminant health management by means of scientific peer-reviewed articles in internationally refereed journals (within the impact factor system) on topics of scientific research or clinical practice. The minimum requirements are as follows.

a) Summaries of five cases related to small ruminant health management, handled by the applicant; at least three of these should be flock/herd health management-related; each case should be described with a maximum of 3000 words and should demonstrate the clinical skills and the approach of the applicant.

b) Either: i) one original small ruminant health management peer-reviewed research article in an internationally refereed journal (the applicant must be the principal author) plus two peer-reviewed case reports in internationally refereed journals (the applicant must be the principal author in both),

or alternatively: ii) two original small ruminant health management peer-reviewed research articles in internationally refereed journals (the applicant must be the principal author in both).

The final responsibility for evaluating a candidate's eligibility to sit the examination rests with the Credentials Committee. In all cases, the Credentials Committee should report promptly and within 90 days of receipt of any application for evaluation of credentials by any candidate. Also, the Credentials Committee should provide a clear indication of any deficiencies in the credentials of any candidate, which prevent sitting an examination.

A 'candidate' is defined as any resident who has completed her/his residency and her/his credentials have been approved by the Credentials Committee, therefore she/he may sit for the certifying examination of the College.

CHAPTER III

European College of Small Ruminant Health Management Residency Program

Definition

An ECSRHM standard residency program or alternative training program is a postgraduate training program that has been approved by the Education Committee of the College, allowing the veterinarian undertaking the postgraduate training program ("resident") to acquire in-depth knowledge of small ruminant health management, as well as of related disciplines, under the supervision and guidance of one or more Diplomates of the ECSRHM.

Supervision is defined as overseeing the performance and operation of the veterinarian, as well as her/his guidance. Direct supervision is defined as the continuous, almost daily, and in close contact supervision. Overall supervision is defined as the regular, but not necessarily in close contact, supervision, in which the supervisor still maintains responsibility for the general plan of training and work of the resident.

General objectives of the ECSRHM training program

The general objectives of the ECSRHM training programs are the following.

- a) To promote excellent skills and proficiency in all aspects of the practice of small ruminant health management.
- b) To train the resident in the science and practice of small ruminant health management and its related disciplines. This may be recognised by the award of a postgraduate university degree (equivalent at least to a Master of Science degree) and constituent training modules or courses of relevance, supervised by European Veterinary Colleges.
- c) To provide the resident with the opportunity to pursue career goals in teaching, research, clinical service and/or specialist practice.

Specific objectives of the ECSRHM residency program

The specific objectives of the ECSRHM residency program are as follows.

1) In relation to practicing the speciality.

During the training period, the resident must learn to:

- * recognise and investigate problems related to all aspects of the speciality;
- * perform all applicable procedures according to the principles of good veterinary practice;
- * co-operate with specialists and colleagues in other related disciplines, to the benefit of small ruminants under his/her care, of the small ruminant livestock sector, of animal welfare, of small ruminant farmers, of colleagues, of consumers of products from small ruminants, of the public in general and of the environment;
- * contribute to the development and application of concepts and methods in flock/herd health management and livestock production;
- * handle emergencies in small ruminant practice;
- * perform diagnostic and therapeutic procedures in small ruminants;
- * establish indications for laboratory diagnostic support, perform laboratory diagnostic procedures (e.g., gross pathology and elementary histopathology) and/or interpret the outcome (e.g., of virological, parasitological, bacteriological, histopathological or immunological examinations), take actions and give advice on the basis of knowledge of flock/herd health and preventive medicine, of zoonoses, of nutrition and housing and of environmental issues;
- * recognise new developments in the speciality;
- * be aware of current European and national regulations with regard to all aspects of small ruminant health, production and welfare;
- * contribute to the development and application of concepts, methods and clinical practice in small ruminant health management.

2) In relation to transfer of knowledge

During the training period, the resident should learn to:

- * summarise and simplify complex issues to be understood by the target audience;
- * approach small ruminant health problems in a scientific way, in order to find solutions and be able to assign priorities for these;

- * express thoughts clearly, in both oral and written form;
- * organise all aspects of his/her work efficiently and effectively;
- * find all necessary information quickly, efficiently and effectively;
- * develop clinical and scientific activities in order to contribute to the development of the speciality.

3) In relation to working as a professional specialist

During the training period, the resident should learn to:

- * keep abreast of new developments in and outside the speciality and become familiar with new methods, before applying these in the practice of small ruminant health management;
- * understand the limitations of the speciality;
- * 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 speciality;
- * have a high moral and ethical standard with regard to his/her contribution to protection of small ruminant health and welfare, of human health and of the environment.

Requirements for entry in the ECSRHM training programs

The requirements for entry to an ECSRHM training program are as follows.

1) Professional requirements

Prospective residents will be required to have broad training and experience in clinical small ruminant health management, as well as in related disciplines. This should have been attained by participation in an initial period of one (1) year in rotating internship or its equivalent, as defined by the Education Committee of the College.

In this context, rotating may mean rotating between a specialist training centre, (e.g., a university clinical department) and/or in a veterinary practice with significant farm animal (ruminants) work component or rotating between two specialist training centres. An accepted equivalent to this scheme would be a similar period of at least two (2) years of work at a veterinary practice with significant farm animal (ruminants)

work component with simultaneous postgraduate continuing education.

Internship programs should meet the following three requirements.

i) Duration: 12 months.

ii) Specifications: covering all aspects of general small ruminant veterinary practice, preferably (but not necessarily) under the direct supervision of at least one ECSRHM Diplomate.

iii) Documentation: certificate of internship and/or reference letter signed by the supervisor of the program, mentioning date of start, date of end, tasks performed and name of the supervisor.

If a prospective resident does not meet the above criteria, then she/he should submit a description of the proposed training program to the Education Committee for approval before the beginning of the actual training program. The Education Committee of the College advises on modifications to the proposed training program (including any possible extensions), in order to compensate for the deficiencies.

2) Administrative requirements

Each training program should have a Program Director and a Resident Supervisor.

The Program Director must be a Diplomate of the ECSRHM and will be responsible for the administration and continuity of the residency program. She/He will assign a Resident Supervisor.

The Resident Supervisor must be a Diplomate of the ECSRHM (or a person equivalent to that, approved by the Credentials Committee of the College) and will be allowed to train up to three residents concurrently. She/He will be responsible for the administration and evaluation of the general and specific program requirements for the resident.

The role of Program Director and Resident Supervisor may be vested in the same individual.

Description of the ECSRHM training program

The ECSRHM training program shall consist of a period of three (3) years of supervised training, postgraduate education and clinical experience in the science and practice of small ruminant health management and its related disciplines, under the direct supervision and guidance of at least one Diplomate of the ECSRHM.

This period can be undertaken continuously on a full-time (standard residency program) or intermittently (alternative training program) on a part-time basis. In all cases, the total training time should equal to three (3) years full-time and the total time period of an alternative training program should not exceed seven (7) years.

Training will take place under the supervision of at least one Diplomate of the ECSRHM, who participates actively in that program.

For the purposes of the training described here above, there shall be no restrictions on specialist training centres or veterinary practices with significant small ruminant work component, as long as these meet the requirements for approved training agreed by the Education Committee. Residents are encouraged to gain experience in several specialist training centres or veterinary practices with significant small ruminant work component during the period of their training, in order to experience a wide clinical caseload and gain experience into all aspects of the speciality.

The Education Committee will approve the training program of each institution and the individual alternative training programs, in consultation where necessary with the Credentials Committee. In undertaking this process, the Education Committee will take due care of the required level of training in areas overlapping between related specialities, covered by other EBVS approved European Veterinary Speciality Colleges.

General guidelines on training requirements are available from the Education Committee, when assessing the suitability of a residency program. In any case, with regard to nutrition, a resident should spend two (2) months attending nutritional training, conferences and courses, as well as working with a specialist nutritionist. With regard to reproduction, a resident should spend three-and-a-half (3.5) months working in applied small ruminant reproduction; additionally, a resident must obtain theoretical knowledge of the physiology and the diseases of small ruminants reproduction through seminars and lectures or by attending scientific conferences. With regard to pathology, a resident should spend three-and-a-half (3.5) months working in applied small ruminant pathology (e.g., post-mortem techniques, laboratory procedures etc.); additionally, a resident must obtain theoretical knowledge of the pathology of diseases of small ruminants through seminars and lectures or by attending scientific conferences.

Total time requirements of the ECSRHM Residency Program

1) Training in small ruminant veterinary practice

Two-thirds (2/3) of the program must be spent in small ruminant veterinary practice, under the direct supervision of a Diplomate of the ECSRHM.

Postgraduate studies may be included in the program; however, at least two-thirds (2/3) of the time in that combined postgraduate studies and residency program must be allocated to small ruminant health management. If postgraduate studies are to be undertaken simultaneously with a training program, then the Education Committee of the College may stipulate that the training program must be extended beyond three (3) years.

The resident must spend ten percent (10%) of his/her time, in order to gain specialised training in reproductive physiology, control of reproduction, investigation of reproductive failure, obstetrics, artificial insemination and reproductive biotechnology. Residents should attend conferences and/or seminars related to animal reproduction, even if material being discussed does not relate to small ruminants. This training is important for the resident to understand small ruminant reproductive management.

The resident must spend ten percent (10%) of his/her time, in order to gain specialised training in post-mortem techniques, sample collection, sample packaging/transport, processing in the laboratory, routine haematological, biochemical and bacteriological methods, evaluation of gross pathological, histopathological, immunological, bacteriological, parasitological, virological and serological findings, principles of toxicology and an understanding of all relevant terminology and nomenclature. Residents should attend conferences and/or seminars related to animal pathology, even if material being discussed does not relate to small ruminants. This training is important for the resident to understand the activities of a veterinary laboratory, as well as the necessity for collaborating with the laboratory when investigating clinical problems. Participation, discussion and observation within the laboratory would lead to a deeper appreciation and understanding of the teamwork required by the pathologist, the laboratory personnel and the clinical specialist.

2) Academic training

Residents must spend at least twenty percent (20%) of their program in one or more of the following ways:

i) Research and publications, as follows.

a) Research project, as follows. Over a period of twenty-four (24) months, the resident must complete a research (field or experimental) project, contributing to the advancement of small ruminant health management. The scientific papers referred to throughout the present document, may originate from this project. This project may also be part of postgraduate studies. A project report of up to 5000 words should be produced.

b) Case summaries and publications, as follows.

- Summaries of five cases related to small ruminant health management, handled by the resident; at least three of these should be flock/herd health management-related; each case should be described with a maximum of 3000 words and should demonstrate adequate clinical skills and the approach of the resident.

- Either: one original small ruminant health management peer-reviewed research article in an internationally refereed journal (the resident must be the principal author) plus two peer-reviewed case reports in internationally refereed journals (the resident must be the principal author in both), or alternatively two original small ruminant health management peer-reviewed research articles in internationally refereed journals (the resident must be the principal author in both).

ii) Attendance of scientific meetings, presentation of papers and teaching responsibilities, as follows.

a) The resident is required to attend "in house" meetings, case discussion sessions, journal clubs, seminars etc. Furthermore, the resident should attend at least three national or international scientific meetings dealing with small ruminant health management. Attendance of meetings in related disciplines is also encouraged and appreciated; participation in training courses in the area of small ruminant health management is also encouraged. Many different organisations, societies and institutions that provide such meetings, courses and programs, are available throughout Europe.

b) The resident must present a minimum of four seminars (defined as a scientific presentation followed by a discussion period, with total time at least 45 minutes) during the training program. The resident must also present at least two research or clinical papers in national or international scientific meetings.

c) The resident is expected to participate in the clinical education of graduate veterinarians and/or veterinary undergraduate students.

Contents of the ECSRHM Training Program

The resident should gain an in-depth and detailed knowledge (unless otherwise stated) of the following areas of small ruminant health management.

1) Infectious and parasitic diseases

Viral, bacterial and parasitic diseases and syndromes of small ruminants (sheep, goats) commonly encountered in Europe, including their aetiology, epidemiology, prevalence, pathology, differential diagnosis, diagnosis, treatment, resistance patterns to chemotherapeutic agents, control and prevention.

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

Diagnostic methods, 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 gross pathological, histopathological, serological, virological, parasitological and bacteriological examinations.

Principles of immunology; vaccination programs used to prevent infectious diseases at the flock/herd and region/country population level.

Antiparasitic programs used to control and prevent parasitic diseases at the flock/herd and region/country population level.

Notifiable diseases of small ruminants and all related appropriate legislation at the level of the European Union.

2) Reproduction

Normal and abnormal reproductive behaviour, artificial control of reproduction, husbandry aspects of reproduction, principles of male animals use, management of female animals, mating behaviour, 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 problems in female animals, problems during pregnancy with special reference to infectious abortions, normal parturition, epimeletic and etepimeletic behaviour, obstetrical procedures, common causes of impaired reproductive performance (aetiology, epidemiology, prevalence, pathology, differential diagnosis, diagnosis, treatment, control and prevention), recording of reproduction data, methods for investigation, improvement of reduced reproductive performance, interpretation of records, organisation of fertility control schemes, artificial insemination, reproductive problems in male animals (aetiology, epidemiology, prevalence, pathology, differential diagnosis, diagnosis, treatment, control and prevention), fertility evaluation of male animals, use of ultrasonography for reproductive examination, neonatal diseases, post-parturient disorders of female animals.

Implementation of reproductive flock/herd health policies.

Understanding of modern reproductive technologies (without specific specialist expertise), such as embryo transfer and associated techniques.

3) Epidemiology

The application of epidemiological principles, methods and techniques, such as risk assessment in flock/herd health programs on an international, national, multiple flock/herd and individual flock/herd basis, export and import rules and regulation both within Europe and with countries outside Europe.

Working knowledge of applied biostatistics.

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

Biosecurity and infectious disease control methods on small ruminant farms and within the small ruminant industry in its widest context.

4) Animal production

Economics: structure and economics of the European small ruminant industry, animal health economics as applicable to small ruminant farms and populations, markets and marketing of small ruminants and their products.

Production systems: detailed knowledge of small ruminant production systems throughout whole Europe, principles of small ruminant production systems outside Europe, breeds of small ruminants with special reference to European breeds (morphological and production characteristics, geographical distribution).

Genetics: genetic improvement of stock, heritability of characteristics, selection for specific characteristics, breeding programs, economic assessment of genetic gain,

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

Housing: production systems (detailed knowledge of all aspects of commonly used production systems), small ruminant housing and its impact on health, animal welfare and disease for all classes of small ruminants.

Nutrition: anatomy of digestive tract, physiology and principles of normal digestion, methods of feed analysis, principles of diet formulation, nutritional requirements of small ruminants at different ages and stages of production, common dietary constituents used in compounding and formulating rations, feed storage and conservation, feed supplements and additives, methods of feed dispensing, fodder flow, evaluation of pasture.

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 small ruminants, impact of biotechnology on welfare, EU legislation.

5) Safety of products

Pre-harvest food safety measures (control of infectious agents, prudent use of antibiotics etc.), slaughtering methods, meat processing and inspection and testing methods; quality assurance schemes.

Milking techniques, principles of milk processing and of dairy products from small ruminants' milk.

Fibre production from small ruminants (wool, mohair, cashmere).

6) Therapeutics

Therapeutics and medicines control, EU medicine legislation, administration of medicines (including vaccines and reproductive management products) and their strategic use in flock/herd health management programs.

7) Surgery and anaesthesia

Basic knowledge of common methods and procedures applied in the practice of small ruminant health and production is required.

8) Reporting

Scientific writing, presentation of reports from investigations in the scientific literature, report writing for clients, production of pamphlets, newsletters and popular articles.

Documentation and verification of the ECSRHM training programs

The ECSRHM, the Program Director, the Resident Supervisor and the resident have responsibilities for documentation and verification of satisfactory training in each training program.

1) ECSRHM

The ECSRHM is overall responsible i) for supervising the training programs around Europe and ii) for intervening if it becomes evident that the Constitution, the Bylaws or the training provisions of the College are not met.

The Education Committee of the College should be informed of any deficiencies in a training program.

2) Program Director

The Program Director is responsible i) for verifying the pre-training requirements, ii) for confirming suitable facilities, equipment and supplies within 30 days of initiation of a training program and iii) for distributing all documentation and verification forms to each resident annually.

3) Resident Supervisor

The Resident Supervisor is responsible i) for verifying annual progress and performance evaluations, ii) for verifying the Resident Activity Logbook, iii) for verifying the resident dossier, iv) for initiating and maintaining interdisciplinary contacts and co-operation where appropriate, v) for evaluating the resident's progress, vi) for informing the resident of any deficiencies in his/her progress, vii) for producing an annual report about the resident to be signed by both herself/himself and the resident and viii) for informing the Education Committee of the College of any deficiencies in the training program

4) Resident

The resident is responsible i) for maintaining the Resident Activity Logbook (indicating his/her training steps, results achieved, service provided, instructions completed), ii) for maintaining the Resident Dossier (comprising the Resident Activity Logbook along with lists of presentations, publications, seminars given/attended, congress/conference attendance, documentation on external training), iii) presenting annually an updated curriculum vitae to the Resident Advisor and the Program Director and iv) send the annual logbook and the supervisor the annual report of

his/her residents at the end of the natural year (December). This should also summarize how the research project is progressing.

5) Procedure for approval of proposed training programs

i) The course director of the proposed training program submits a detailed proposal to the Chairperson of the Education Committee stating the objectives of the program and explaining how the program meets the objectives and the standards required by the College.

ii) The Chairperson of the Education Committee circulates the proposal to members of the Committee.

iii) Members of the Committee comment and point out possible deficiencies in the proposal.

iv) The Chairperson of the Education Committee writes to the course director of the proposed program, requesting clarification of any points that are unclear and seeking further information on possible deficiencies.

v) The course director of the proposed program submits a revised proposal, answering to comments made and covering possible deficiencies.

vi) The Committee considers the revised proposal and the response provided and develops a recommendation for action by the Board College.

vii) The Board of the College officially approves or does not approve the residency program.

viii) The whole procedure must be completed within 90 days after receipt of the initial proposal.

Facilities, services and equipment required in a ECSRH training program

1) Library

A library containing a comprehensive range of recent textbooks and current journals relating to small ruminant health management and its supporting disciplines must be accessible to the residents. Electronic access to journals is also allowed.

2) Access to small ruminant farms and animal cases.

Access to at least ten sheep/goat farms is required. At least 100 sheep/goat cases should be handled annually. At least five sheep/goat farms, where management strategies are applied, should be available.

3) Records

Complete record must be maintained for each case and those records must be

retrievable.

4) Computer facilities

Up-to-date computer facilities with access to the Internet and relevant software including herd health programs and automated literature search systems.

5) Pathology facilities

An appropriate room for pathological examination must be available. Anatomic pathology reports must be retained and retrievable.

Procedure for approval of recognised centres for training of residents

i) A senior member of staff, always Diplomate of the College, of the proposed centre for training of residents submits a detailed report to the chairperson of the Education Committee stating the objectives of training courses, detailing all facilities of the proposed centre, introducing all personnel to be involved in training of future residents, underlining the clinical work undertaken and mentioning all collaborations with other places in order to fulfil the various requirements of the training program (e.g., reproduction, pathology, nutrition etc.).

ii) The Chairperson of the Education Committee circulates the report to members of the Committee.

iii) Members of the Committee comment and point out possible deficiencies in the report.

iv) The Chairperson of the Education Committee writes to the senior staff member of the proposed centre, requesting clarification of any points that are unclear and seeking further information on possible deficiencies.

v) The senior staff member submits a revised report, answering to comments made and covering possible deficiencies.

vi) The Committee considers the revised report and the response provided and develops a recommendation for action by the Board.

vii) The Board officially recognises or does not recognise the centre for training of residents.

viii) The whole procedure must be completed within 150 days after receipt of the initial report.

Approval of a recognised centre for training centre of the College is granted for a five- year period. After that period, re-approval is necessary every five years thereafter and is based in following the above procedure and criteria.

Specific procedure to be followed in countries with no ECSRHM Diplomates

In countries where there is no Diplome of the ECSRHM, the College may, under certain circumstances, waive the requirement for a training program directly supervised by a Diplome of the ECSRHM.

In this case, another veterinarian can be appointed as local supervisor, if the Education Committee approves his/her qualifications, which should always include national specialist level and an association with European veterinary specialisation. These will be evaluated after submission to the Committee of a detailed *curriculum vitae* of that person, providing evidence of scientific knowledge, ability to supervise the Resident and extensive clinical experience.

The Committee also examines the proposed program and evaluates the standards, by following the procedure previously described; the proposed program should meet standards required by the College.

In this case, a Diplome of the College should also be appointed as co-supervisor, in order to monitor the progress of the program and to evaluate - confirm the adequacy of standards. The resident should also report to the co-supervisor.

CHAPTER IV

Application procedure for the ECSRHM examinations

Applicants must submit full typed copies of their credentials to the Secretary of the College before March of the year of anticipated examination. Similarly, all candidates to sit the exam that year should report this to the credentials committee before March.

The criteria for admission to the College are described in Chapter II ("Requirements for admission to the College") and must be met at the time of the application. Late applications will be considered for the following year's examination.

All candidates must submit the standard application form of the College together with all other required documents and proof of payment of the application fee.

The credentials must verify the successful completion of a standard residency program or of an alternative training program.

The responsibility for accuracy and availability of all required credentials rests with the applicant, who must attest to this in writing. The applicant should ensure prompt and timely delivery of the credentials to the Secretary of the College.

Documentation

The following completed and verified documentation must accompany the application.

- a) Completed application form, available from the Secretary of the College.
- b) Full *curriculum vitae*. The *curriculum vitae* should be submitted in the following format.
- c) Activity Logbook.
- d) List of scientific presentations.
- e) Copies of correspondence related to the training program and the application.
- f) Book with Summaries of five cases related to small ruminant health management, handled by the applicant; at least three of these should be flock/herd health management-related; each case should be described with a maximum of 3000 words and should demonstrate the clinical skills and the approach of the candidate.
- g) Copies of either: i) one original small ruminant health management peer-reviewed research article in an internationally refereed journal (the applicant must be the principal author) plus two peer-reviewed case reports in internationally refereed journals (the applicant must be the principal author in both), or alternatively: ii) two original small ruminant health management peer-reviewed research articles in internationally refereed journals (the applicant must be the principal author in both).

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 (even at the stage of revision) are not acceptable for fulfilment of this requirement and should not be taken into account.

The documents here above [a) to g)] must be arranged clearly and in the sequence listed; they should be indexed and bound in folders to prevent loss and to facilitate review. The applicant's name should be on the front of each folder. If necessary to bind the supporting material in two volumes, items a) to e) should be in

Volume 1 and items f) and g) in Volume 2.

Reference letters

Each applicant should also have at least one letter of reference from the Supervisor(s) at each institution or practice involved in the training program. All letters must be from persons familiar with the applicant's training program. Each referee should mail his/her letter DIRECTLY to the Secretary of the College. The letters are confidential and should NOT be handed to the applicant for forwarding.

The applicant must ensure that requests for reference letters are made early, in order for these to arrive with the Secretary on or before the application date (i.e., March). It is the applicant's responsibility to ensure prompt and timely delivery of all reference letters to the Secretary on time. Applications without at least one reference letter will be considered to be incomplete.

The Credentials Committee is responsible for absolute discretion and confidentiality regarding the reference letter(s). After approval of the applicant to sit the examination, the reference letter(s) should 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 ECSRHM.
- d) The moral and ethical standing of the applicant within the veterinary profession.

Application fee

No application will be processed or evaluated, if not accompanied by proof of payment of the appropriate application fee. The application fee is non-refundable.

The application fee for evaluation of credentials is set at 200 Euros. The fee may be changed as required by a decision of the Board of the College, as proposed by the Treasurer.

The application fee should be paid directly to the College's bank account or else collected by the Treasurer by any other means. Bank receipt or receipt from the Treasurer are considered to be adequate as proof of payment.

Acceptance of credentials

The Secretary of the College will forward all applications to the Credentials

Committee of the College. The Credentials Committee will evaluate all applications according to the provisions of the Constitution, the Bylaws and the training provisions of the College and will confirm that the applicants meeting all requirements are allowed to sit the examination, i.e. becoming candidates.

The final responsibility for evaluating a candidate's eligibility to sit the examination rests with the Credentials Committee. In all cases, the Credentials Committee should report promptly and within 90 days of receipt of any application for evaluation of credentials by any candidate. Also, the Credentials Committee should provide a clear indication of any deficiencies in the credentials of any candidate, which prevent sitting an examination.

A 'candidate' is defined as any resident who has completed her/his residency and her/his credentials have been approved by the Credentials Committee, therefore she/he may sit for the certifying examination of the College.

Subsequently to acceptance of the credentials by the Credentials Committee and approval by the Board of the College, the Secretary of the College should accordingly notify all applicants. Candidates may then proceed to the examination. The Examination Committee of the College would then notify candidates of the precise dates and procedures of examination.

Deficient credentials - Re-application

Applicants unsuccessful at this stage should be notified at the same time by means of a letter detailing the deficiencies in their credentials. A subsequent re-application must include re-submission of all credentials (four copies), as well as an outline from the applicant explaining how deficiencies have been corrected. During re-application, the materials must be presented in the manner previously described with the addition of the applicant's report [item i)].

Nevertheless, and only in cases of minor or technical deficiencies in the application, the Credentials Committee may invite a re-application of the credentials by 1st May of the same year, subject to the payment of a reduced evaluation fee, which is set at 100 Euros. The fee may be changed by decision of the Board of the College, as proposed by the Treasurer. In these cases, the same procedure as above is followed. The College should process such applications by the 31st May of the same year of the initial application. The Secretary of the College should notify the applicant accordingly by the 15th June of the same year of the initial application.

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

Examination fee

No candidate can proceed to the examinations and final evaluation without payment of the appropriate examination fee having been settled in full, before 1st June of the year of anticipated examination.

The examination fee is non-refundable. However, the Board of the College may allow the examination fee to count towards next year's examination, if the candidate was unable to participate to the examinations as a consequence of health problems, serious personal problems or *force majeure* (e.g., strike in the travel industry).

The fee for sitting the examination is set at 1000 Euros. The fee may be regularly changed by decision of the Board of the College, as proposed by the Treasurer.

CHAPTER V

Examination

The examination process of the ECSRHM should be of a standard to identify and certify specialists of the highest order in the veterinary speciality of small ruminant health management. The College normally organises examinations on an annual basis. However, if in a given year there are less than four candidates, the Board of the College - at the suggestion of the Examination Committee- may postpone the examination for one year only. In that case, the examination should be held on the following year, independently of the number of candidates.

Before being allowed to sit an examination, the applicant's credentials must be evaluated and approved by the College's Credentials Committee. Further, any examination candidate must have been awarded their veterinary degree at least 48 months prior to sitting the certifying examination.

It is the responsibility of the College and anyone involved in the examination procedure to maintain confidentiality throughout the entire procedure.

A member of the Examination Committee, whose supervised resident is sitting the College certifying examination, must abstain from that procedure and must be replaced by one of the substitute members.

During the examination, multiple choice type questions are used to define the breadth of knowledge, essay type questions 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 ECSRHM must have sound working knowledge of general small ruminant veterinary practice skills, as well as the specialist skills attributable to the speciality of small ruminant health management.

The examination is intended to assure that Diplomates of the College have the required level of knowledge in the speciality that is on a level equal to, or better than, any other specialist qualification in this (or closely related) field worldwide. Example questions or previous examinations questions are available at the College's website.

While it is intended that imperfect knowledge of the English language should not result in an unfair handicap, 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. During the examination, a (non-medical) dictionary would be allowed to help with language problems.

The examination will test all aspects of small ruminant health management and should be composed of the following two parts.

a) The first part of the examination is the written examination, which should consist of the following three papers:

- Paper 1 - multiple choice questions with only one correct answer. The exam cannot mix questions asking for the true statement and questions asking for the false statement. Only one of those two types of question should be used along the exam.
- Paper 2 - short essay questions on clinical topics
- Paper 3 - essay type questions, which should include problem solving and data assessment type questions.

The total time of the written examination should not exceed six hours.

b) The second part of the examination is the oral/practical examination, during which case management problems covering any aspect of small ruminant health management are presented to candidates. The oral section of the examination is designed to test problem solving capabilities and skills, as well as practical skills. Members of the Committee may use practical material (i.e., animals, slides, results of laboratory tests) to confirm the standards of knowledge of the candidates. During that section of the examination, material submitted by the candidate and referring to the training program (i.e., research project, case summaries and publications) can be discussed; these should have been made available to the Examinations Committee in advance. This part will be divided in two phases:

- Phase 1: candidates should give an oral presentation on their clinical research topic. This oral presentation should be of 20 minutes approximately. The digital file, or printed copy, of the presentation should have been made available to the Examinations Committee at the beginning of the exam procedure.
- Phase 2: Once the oral presentation is finished, a minimum of three members of the Examinations Committee should question each candidate for a maximum total time of three hours per candidate.

Each paper is marked separately by a minimum of three members of the Examinations Committee.

The final exam result is calculated as follows:

Paper 1 - MCQ - score is the percentage of correct answers (MCQ%).

Paper 2 – each examiner marks the paper rating each question on a scale of 1 to 10 points, then a % is calculated dividing the total points obtained by the maximum points that could be obtained in the paper. The final Paper 2 score is the arithmetic mean of all examiners' percentages, it is expressed as a percentage (SEQ%)

Paper 3 - each examiner marks the paper rating each question on a scale of 1 to 10 points, then a % is calculated dividing the total points obtained by the maximum points that could be obtained in the paper. The final Paper 3 score is the arithmetic mean of all examiners' percentages, it is expressed as a percentage (LEQ%)

Oral examination – In phase one of the oral exam, each examiner rates the oral presentation on a scale of 1 to 10. This value is converted to a % which constitutes $\frac{1}{4}$ of the total score in the oral examination. In phase two each question is graded on a scale of 1 to 10 points, then a % is calculated dividing the total points obtained by the maximum points that could be obtained in this phase. This score constitutes $\frac{3}{4}$ of the

total score in the oral examination. The final oral examination score is the arithmetic mean of all examiners' percentages, it is expressed as a percentage (OQ%)

The final result of the exam is expressed in % and is calculated from the formula:

$$\text{final percentage} = 1/6 * \text{MCQ}\% + 1/6 * \text{SEQ}\% + 1/3 * \text{LEQ}\% + 1/3 * \text{OQ}\%$$

The minimum acceptable standard to achieve a pass in the qualifying examination is 65%.

The chairperson of the Examination Committee should forward details of candidates who will have passed the examination, within two days to the President of the College. The results of the examination will then be forwarded to the candidates, in writing, within 14 days of the completion of the examination.

In case where a candidate fails to reach the minimum standard for passing the examination, a brief (up to one page) written report of the Examination Committee should also be provided, in order to aid their preparation for future examination attempts.

Repeat examinations

The number of re-applications to sit the examination is limited to three. Failure to pass the examination within eight years after finishing the training program would prevent the candidate from being admitted to the College, unless she/he undertakes a new training program.

Candidates repeating the examination need not undertake again the application procedure again. However, they may at their initiative undertake further training process.

Applicants re-sitting the examination should submit the following material for the attention of the Examination Committee.

- a) Updated documentation [described in Chapter IV, items a) to g)].
- b) A written outline from the candidate explaining how deficiencies (mentioned in the written report of the Examination Committee) have been corrected.
- c) A list of all dates of previous examination attempts.
- d) Proof of payment of the appropriate examination fee at each attempt.