



**AUSTRALIAN AND NEW ZEALAND
COLLEGE OF VETERINARY SCIENTISTS**

FELLOWSHIP GUIDELINES

Veterinary Dermatology

ELIGIBILITY

1. The candidate must meet the eligibility prerequisites for Fellowship outlined in the *Fellowship Candidate Handbook*.
2. Membership of the College must be achieved prior to Fellowship examination.
3. Membership may be in any discipline.

OBJECTIVES

To demonstrate that the candidate has sufficient knowledge, training, experience, and accomplishment to meet the criteria for registration as a specialist in Veterinary Dermatology.

LEARNING OUTCOMES

1. The candidate will have a **detailed**¹ knowledge of:
 - 1.1. the normal structure and function of the skin, including regional variances in domestic species;
 - 1.2. the basic immune function and the role of the skin as an immunological organ, as well as the pathophysiology of immunological disorders and comparative aspects of diseases amongst canine and feline species as well as humans;

¹ **Knowledge Levels:**

Detailed knowledge - candidates must be able to demonstrate an in-depth knowledge of the topic including differing points of view and published literature. The highest level of knowledge.

Sound knowledge – candidate must know all of the principles of the topic including some of the finer detail, and be able to identify areas where opinions may diverge. A middle level of knowledge.

Basic knowledge – candidate must know the main points of the topic and the core literature.

- 1.3. pathophysiology of endocrine disorders with dermatological manifestations;
 - 1.4. the normal ecology of cutaneous flora as well as the pathophysiology of bacterial, viral, fungal and parasitological organisms that incite skin disease in canine and feline species;
 - 1.5. the aetiology, clinical signs, pathogenesis, diagnosis, management and prognosis of all the infectious and non-infectious dermatological diseases of canine and feline species and the infectious diseases exotic to Australia and New Zealand which could be introduced, and
 - 1.6. the cutaneous manifestations of systemic disease, including a detailed knowledge of the internal medicine pertaining to these diseases.
2. The candidate will have a **sound**¹ knowledge of:
 - 2.1. dermatological diseases, their diagnosis and management in equine and production animal species;
 - 2.2. the comparative aspects of dermatological disease occurring in humans and animals;
 - 2.3. the general principles of cutaneous oncology in all species, including tumours that affect the skin, paraneoplastic conditions and anti-neoplastic therapy, and
 - 2.4. the pharmacology and pharmacokinetics of all drugs and therapeutic products used in veterinary dermatology.
 3. The candidate will have a **basic**¹ knowledge of:
 - 3.1. Dermatological diseases, their diagnosis and management in wildlife species, fish, reptiles, laboratory animals and other species.
 4. The candidate will be able to, with a **detailed**¹ level of expertise:
 - 4.1. perform and interpret all specialist level dermatological diagnostic procedures (performed in the clinic) including but not limited to intradermal allergy testing, oto-endoscopy with ear flushing, skin biopsy and nail bed biopsy;
 - 4.2. design management plans in clinical cases involving the skin and related organ systems;
 - 4.3. analyse complex dermatological medical problems and make sound clinical judgements;
 - 4.4. collect, interpret and record clinical data derived from a range of diagnostic modalities including but not limited to cytology, dermatohistopathology;
 - 4.5. communicate effectively with clients, referring veterinarians and peers;

- 4.6. integrate these skills to provide high quality care for patients with the most efficient use of resources in a manner that is responsive to the owner's needs and wishes;
 - 4.7. evaluate and incorporate new scientific information relevant to the practice of veterinary dermatology, and
 - 4.8. advance knowledge in veterinary dermatology through clinical innovation, research and publication and presentation.
5. The candidate will be able to, with a **sound**¹ level of expertise:
- 5.1. collect, interpret and record clinical from a range of diagnostic modalities including, but not limited to immunofluorescence, immunohistochemistry, biochemistry and haematology.
6. The candidate will be able to, with a **basic**¹ level of expertise:
- 6.1. collect, interpret and record clinical data from a range of diagnostic modalities including but not limited to electron microscopy (EM), polymerase chain reaction testing (PCR) and other immunological testing of normal and diseased skin and computerised tomography (CT scanning) and magnetic resonance imaging (MRI) of normal and diseased ears
 - 6.2. record scientific data for statistical testing and interpretation.

EXAMINATIONS

Refer to the *Fellowship Candidate Handbook*, Section 5.

Information published in journals until April 30th of the year of the examination will be examinable.

The Fellowship examination has four **separate, autonomous components**:

1. **Written Paper 1** (*Component 1*)
Principles of the Subject (three hours)
2. **Written Paper 2** (*Component 2*)
Applied Aspects of the Subject (three hours)
3. **Practical Examination** (*Component 3*)
Practical Part A (two hours): Histopathology
Practical Part B (two hours): Digital Images
4. **Oral Examination** (*Component 4*)
Oral (a minimum of one hour)

The written examination will comprise of two separate three-hour written papers attempted on two consecutive days. There will be an additional 20 minutes perusal time for each examination paper, during which no writing in an answer booklet is permitted. The written paper will provide a total of 180 marks per paper. It will contain multiple choice questions or very short answer questions, and long answer questions. There is no choice of questions. Marks allocated to each question and to each subsection of a question will be clearly indicated on the written paper.

Written Paper 1: Basic Science and Principles

This paper is designed to test the candidate's knowledge of the principles of veterinary dermatology as described in the Learning Outcomes. Answers may cite specific examples where general principles apply, but should primarily address the theoretical basis underlying each example.

Paper 1 may cover, but is not limited to, the following:

1. The normal structure and function of the skin, including regional variances of all domestic species.
2. The basic immune function and the role of the skin as an immunologic organ, as well as the pathophysiology of immunologic disorders and comparative aspects of diseases affecting the skin amongst domestic species as well as humans.
3. Endocrinology and normal physiology relevant to dermatology and the pathophysiology of endocrine disorders with dermatologic manifestation.
4. The normal ecology of cutaneous flora as well as the pathophysiology of bacterial, viral, fungal and parasitological organisms that incite skin disease in all species.

Written Paper 2: Clinical Practice and Applications

This paper is designed to (a) test the candidate's ability to apply the principles of the veterinary dermatology to particular cases/problems or tasks, and to (b) test the candidate's familiarity with current practices and current issues that arise from activities within the discipline of veterinary dermatology in Australia and New Zealand.

Paper 2 may cover, but is not limited to, the following:

1. The aetiology, clinical signs, pathogenesis, diagnosis (including diagnostic tests), treatment, management and prognosis of all the infectious and non-infectious cutaneous diseases of domestic species and laboratory animals, including conditions exotic to Australasia which could be introduced.
2. The cutaneous manifestations of systemic disease, including a detailed knowledge of the internal medicine pertaining to these diseases.

3. The pharmacology and pharmacokinetics of all drugs and therapeutic products used in veterinary dermatology.
4. The general principles of cutaneous oncology in all species, including tumours that affect the skin, paraneoplastic conditions and antineoplastic therapy.
5. The comparative aspects of dermatologic disease occurring in humans and animals.

Practical Examination:

The two components of the practical examination are designed to test the practical aspects of the Learning Objectives. Written answers will be required. No perusal time will be given for either component of the practical examination.

The candidate is expected to demonstrate competence in: cytology, histopathology, immunofluorescence, immunohistochemistry and electron microscopy of normal and diseased skin, and including other diagnostic tests as outlined above in Learning Outcomes, according to the varying level of knowledge expected of the candidate.

Part A: Histopathology

This section will consist of a series of five questions of equal weighting, equating to a total of 125 marks. The candidate is expected to critically examine and discuss the pathological changes in histological sections of dermatological tissue.

Part B: Digital Images

This section consists of fifty questions of various weighting with a total of 100 marks. Marks allocated to each question will be clearly indicated. The candidate will be required to demonstrate and discuss dermatological examination, observation and diagnostic skills pertaining to commonly encountered species. Methods of delivery of question material include, but are not limited to, audiovisual presentation of images including cytological, histopathological, immunofluorescence, immunohistochemistry, EM, radiograph, CT and MRI images, and may include written presentation of clinical material. Written questions may be included in the absence of digital images but are of a practical nature.

Oral Examination:

The oral examination will be scheduled on a separate day after the practical examination component.

The oral examination is designed to test practical aspects of the Learning Objectives such as those in section 4, 5, and 6 above, that is, the ability of the candidate to discuss, defend, rationalise, analyse and integrate their knowledge at the level of a specialist.

LEARNING OBJECTIVES

The candidate is expected to have:

1. Extensive practical experience and accomplishment relevant to Australia or New Zealand and an understanding of veterinary dermatological conditions on a global basis.
2. Recognition as an authority by veterinary colleagues and by other professional people working in the field.
3. Critically evaluated the current literature and concepts in the field of veterinary dermatology.

TRAINING PROGRAM

In addition to the requirements of the Fellowship Candidate Handbook, the Chapter imposes the following:

Minimum case number thresholds to be accomplished within the 96 weeks training program:

1. *The Board of Examiners and Council advises candidates that case number thresholds are a guide.* Candidates must see at least 600 dermatology cases within the training period, of which a minimum of **50 cases** must be feline, a minimum of 15 cases must be equine and at least **25 cases** must be included from the following species: production animals, laboratory animals, birds, reptiles, fish and other species. Cases and procedures must be of the type seen in dermatology referral practice, which are considered to be at a specialist level. The candidate should attempt to gain as broad a range of experience as possible using the categories listed in the Activity Log Summary as a guide.
2. Candidates should demonstrate experience in a variety of procedures commonly performed in specialist dermatology referral practice. A guide to the recommended number of procedures performed is as follows:
 - a. Skin biopsies (including skin, nose, pinnal, gingival biopsies): a minimum of twenty (20) in total
 - b. Nail bed biopsies: a minimum of two (2)
 - c. Otoendoscopy: a minimum of twenty (20)
 - d. Myringotomy: a minimum of five (5)
 - e. Intradermal testing
 - i. Perform and interpret as a primary clinician at least five (5) on dogs, at least five (5) on cats and at least one (1) on a horse.

- ii. Interpret a hundred (100) as primary or secondary clinician. In the ALS the intradermal tests interpreted are in brackets. For example if 10 tests were performed and 100 tests interpreted, then these are recorded as 10 (100)
3. In addition to directly supervised training, the candidate should be able to demonstrate active participation in formal teaching conferences such as clinicopathological case conferences and resident seminars. A seminar is defined as a scientific presentation attended by peers and followed by informed discussion.
4. The candidate is expected to attend relevant scientific meetings and conferences and attendance at an international veterinary conference is recommended. Proof of attendance will form part of the annual supervisors report. The candidate is required to have prepared and presented their original research project at a national or international dermatological meeting or conference prior to examination. The relevant conferences and meetings include the North American Dermatology Forum (NAVDF), European College of Veterinary Dermatology (ECVD) meeting, World Congress in Veterinary Dermatology (WCVD) or the Dermatology Chapter meeting at Science Week. A poster presentation will not be accepted. The abstract from the meeting must be printed and recorded in the credentials document.

TRAINING IN RELATED DISCIPLINES

Refer to the *Fellowship Candidate Handbook* Section 2.4.2

Candidates for Fellowship in Veterinary Dermatology must spend six of the 96 weeks supervised time in the related disciplines training.

Four weeks (in total, taken in one or several blocks) must be as following:

- small animal medicine (80 hours, 2 weeks), and
- veterinary dermatopathology, histological assessment of skin disease (80 hours, 2 weeks).

At least two additional weeks of TRD may be composed of any of the following disciplines in any combination:

- veterinary diagnostic imaging
- veterinary oncology
- veterinary anaesthesia and critical care
- veterinary laboratory animal medicine
- human dermatology
- human clinical immunological and allergy
- human dermatohistopathology
- veterinary microbiology
- veterinary soft tissue surgery and
- veterinary parasitology
- TRD in other non-listed disciplines may be considered by application. The

candidate should provide a specialist in that field willing to supervise, and to provide learning outcomes for that discipline

Related disciplines training must be undertaken with a registered specialist, or other person approved by the CEC, in that discipline. **See Appendix 3.**

EXTERNSHIPS

Refer to the *Fellowship Candidate Handbook* Section 2.4.1

Candidates for Fellowship in Veterinary Dermatology must complete four weeks of Externship activity. **The Candidate may be required to complete additional Externship(s), following assessment of the Training Program Document by the CEC.** Externships should be used to gain exposure to areas within the program which are deficient, particularly with respect to species under-represented in the activity log summary.

ACTIVITY LOG SUMMARY

Candidates are required to maintain an Activity Log Summary (ALS) that shows the number of cases for disease categories, including by species and a log of procedures. The format of the activity log summary is shown in Appendices 1 and 2.

Candidates **should record the cases for which they were the primary clinician.**

- Cases for which the candidate was not the primary clinician can only be included if the candidate had **active** input into case management. This may include cases seen during externship training. Active input requires an independent case assessment, the formulation of differential diagnoses and a diagnostic plan and the provision of therapeutic and prognostic advice as appropriate for each case. These cases are included in brackets. For example 64 (10) means 64 cases seen as the primary clinician and 10 cases were seen as the secondary clinician.
- **Revisit examinations** of the same disease **do not count towards case numbers.** **Revisit examination where an additional diagnosis is made can be included as an initial case**
- As per section 2.7 and 2.8 of the Fellowship Candidate Handbook and the Annual Supervisor Report (ASR) template section 5 – 6, the supervisor must confirm that the activity log summary is an accurate representation of the cases seen by the candidate.
- Externship supervisors must sign off on the ALS done during the externship period. This will need to be in the form of a letter or statement on the template that states the ALS done during the externship is a true and accurate representation of the cases seen during that period. This statement as follows, must be added to the “externship report” template available on the College website under Fellowship – Fellowship Forms:

- “I agree that the Activity Log Summary from the externship has been sighted and is a true and accurate representation of the activities in which the candidate has been involved.”

Categories for the Activity Log Summary (by body system) template available from the College website is shown in **Appendix 1** of these subject guidelines and are as follows:

- Immune mediated diseases
- Hypersensitivity diseases
- Infectious diseases (parasitic, bacterial, fungal and viral)
- Endocrinopathies
- Cutaneous neoplastic diseases
- Hereditary and congenital disorders
- Metabolic and nutritional disorders
- Environmental insults: physical and chemical
- Other / Unknown

Categories for the Activity Log Summary (by technical procedure) template available from the College website is shown in **Appendix 2** of these subject guidelines and are as follows:

- Skin biopsy (any location)
- Nail bed biopsy
- Otoendoscopy (GA and ear clean)
- Myringotomy
- Intradermal allergy testing

PUBLICATIONS

Refer to the *Fellowship Candidate Handbook* section 2.10

In addition to the requirements of the *Fellowship Candidate Handbook*, the Chapter imposes the following:

The publication should be a topic that furthers the knowledge of veterinary dermatology, i.e not a repeat project or case report of a topic already published unless it differs to that previously published in the literature. The candidate may wish to request approval of a topic or a publication by the CEC prior to submission of the credentials document.

The resident's project must be submitted as an original research study in a peer reviewed publication and must be a Category A publication. Submission of the resident's project as a Short Communication or Poster Presentation will NOT be acceptable

Candidates cannot submit more than one publication covering the same topic material unless these are both publications resulting from original research studies **and** deriving more than one conclusion.

RECOMMENDED READING LIST:

The candidate is expected to research the depth and breadth of the knowledge of the discipline. This list is intended to guide the candidate to some core references (indicated by an *) and source material. The list is not comprehensive and is not intended as an indicator of the content of the examination. Many journal articles can be sourced electronically for example on university library data bases or <http://www.ncbi.nlm.nih.gov/pubmed/>. There may be later editions of texts since the time of writing.

1. Basic Science of the Skin

Medical Texts

*Fitzpatrick's Dermatology in General Medicine. 8th ed. Vol. I and II 2012; and 5th ed. Vol I and II, 1999. Eds: Goldsmith et al. McGraw-Hill Inc.

Physiology, Biochemistry, and Molecular Biology of the Skin. 2nd ed. Vol. 1 and II. 1991. Ed: Goldsmith. Oxford University Press.

Skin, Hair and Nails: Structure and Function 2003. Bo Forslind, Robert E. Albano, CRC Press

Pathophysiology of Dermatologic Diseases. 2nd ed. 1993. Eds: Soter and Baden. McGraw-Hill Inc.

Allergy: principles & practice, 2009. N. Franklin Adkinson, Elliott Middleton. Mosby Elsevier

Human Dermatology and Basic Science Journals

Archives of Dermatology

British Journal of Dermatology

Clinical and Experimental Dermatology

Dermatology

Journal of the American Academy of Dermatology

Journal of Cell Science

Journal of Clinical Investigation

Journal of Investigative Dermatology

International Journal of Dermatology

Lipids

New England Journal of Medicine

2. Immunology and Allergy

Texts

Clinical Immunology of the Dog and Cat. 2011 Michael J. Day. Manson Pub

*Veterinary Immunology. An Introduction. 9th ed. 2012 Tizard. Elsevier Limited, Oxford,

*Cellular and Molecular Immunology. 7th ed. 2011 Eds: Abbas et al. Elsevier Health Sciences.

Immunology

Journals (human and veterinary)

Allergy

Clinical and Experimental Allergy

Clinical and Experimental Immunology

Current Opinion in Allergy and Clinical Immunology

*Journal of Allergy and Clinical Immunology

Trends in Immunology

*Veterinary Immunology and Immunopathology

3. Clinical Dermatology

Veterinary Dermatology Texts

*Muller & Kirks Small Animal Dermatology. Eds: Scott, Miller, and Griffin 7th ed. 2012. Elsevier.

*Advances in Veterinary Dermatology Vol. I-VII. 1990, 1993, 1998, 2002, 2005, 2010, 2013. Wiley Blackwell.

*Allergic Skin Diseases of Dogs and Cats. 2nd ed. 1997. Eds: Reedy, Miller, and Willemse. WB Saunders.

Veterinary Clinics of North America Small Animal Practice.

September 1988, Pruritus;

November 1990, Advances in Clinical Dermatology;

July 1995, Feline Dermatology.

Current Veterinary Dermatology. The Art and Science of Therapy. 1993. Eds: Griffin, Kwochka and Macdonald. Mosby Year Book.

*The American College of Veterinary Dermatology Task Force on Canine Atopic Dermatitis. Veterinary Immunology and Immunopathology. 81:2001. Ed: Olivry. Elsevier Science.

Manual of Small Animal Dermatology. 3rd ed. 2010 Eds: Jackson and Marsella BSAVA.

Small Animal Dermatology. A colour atlas and therapeutic guide. 2010. Hnilica. WB Saunders.

*Equine Dermatology. 2nd Edn 2010. Scott. WB Saunders.

Practical Equine Dermatology. 2003 Lloyd, Littlewood, Craig and Thomsett. Blackwell Publishing.

*Pascoe's Principles & Practice of Equine Dermatology 2nd ed. 2009. Knottenbelt. Elsevier Saunders.

Colour Atlas of Equine Dermatology. 1989. Pascoe. Mosby.

Veterinary Clinics of North America. Equine Practice. Equine Dermatology (due for publication December 2013). Rosychuk R and Yu A.

Colour Atlas of Farm Animal Dermatology. Scott 2007. Blackwell Publishing

Large Animal Dermatology. 1988. Scott. WB Saunders.

Veterinary Clinics of North America. Large Animal Practice.

November 1993, Sheep and Goats;

March 1984, Large Animal Dermatology;

July 1995 Dermatology.

Veterinary Journals

*Veterinary Dermatology

4. Dermatohistopathology

Veterinary Text

*Small Animal Dermatology. Eds: Scott, Miller, and Griffin 6th ed. 2001. WB Saunders.

*Skin Diseases of the Dog and Cat: Clinical and Histopathological Diagnosis. 2nd ed. 2005. Gross, Ihrke, Walder, Affolter. Blackwell Publishing.

*Surgical Pathology of the Dog and Cat (Skin) 1994. Yager and Wilcox Wolfe.

The Skin and Appendages. In: Pathology of Domestic Animals Vol 1. 4th ed. 1993. Yager and Scott. Ed: Jubb. KVF New York, Academic Press.

Skin Tumors of the Dog and Cat. Eds: Goldschmidt and Shofer. 2nd ed 1998. Pergamon.

Tumors in Domestic Animals. 3rd edition. 1990 Ed: Moulton. California Press.

Medical Texts

Atlas and Synopsis of Lever's histopathology of the Skin. 3rd edn. 2013. Elder. Lippincott

Lever's Histopathology of the Skin. 10th edn 2008. Ed: Elder. Lippincott

Pinkus' Guide to Dermatohistopathology. 5th ed. 1991. Eds: Mehregan and Hashimoto. Appleton and Lange.

5. General Medicine

*Textbook of Veterinary Internal Medicine: Diseases of the Dog and Cat. Vol I and II 7th ed. 2010. Eds: Ettinger and Feldman. Elsevier Saunders.

*Infectious Diseases of the Dog and Cat. 4th ed, 2011. Greene. Elsevier.

*Canine and Feline Endocrinology and Reproduction. 3rd ed. 2004. Feldman and Nelson. WB Saunders.

Kirk's Current Veterinary Therapy: Small Animal Practice. 14th ed, 2008. Ed: Bonagura WB Saunders.

*Small Animal Internal Medicine. 4th ed, 2009 Eds: Nelson and Couto, Mosby.

Withrow & MacEwen's Small Animal Clinical Oncology. 5th edn. 2012. Elsevier.

Veterinary Medicine: A Textbook of the Diseases of Cattle, Sheep, Pigs, Goats and Horses. 9th ed. 2000. Eds: Radostits et al. WB Saunders.

Equine Internal Medicine. 3rd edn 2009 Reed SM, Bayly WM and Sellon DC. Saunders Elsevier,

Current Therapy in Equine Medicine 6th ed. 2009 Ed: Robinson. WB Saunders.

Equine Medicine and Surgery 5th ed. 1999 Eds: Colahan et al. Mosby.

Harkness and Wagner's Biology and Medicine of Rabbits and Rodents. 5th ed. 2010 Harkness, Turner, VanderWoude & Wheler. Wiley Blackwell

Manual of Exotic Pet Practice 2009. Mitchell & Tully. Saunders Elsevier

Journals

*Journal of American Veterinary Medical Association

*Journal of American Animal Hospital Association

*Journal of Veterinary Internal Medicine

*American Journal of Veterinary Research

*Veterinary Pathology

*Journal of Small Animal Practice

*Equine Veterinary Journal

*Australian Veterinary Journal

*Compendium on Continuing Veterinary Education (Companion animal and equine)

Australian Veterinary Practitioner

Cornell Veterinarian

Equine Veterinary Education

Veterinary Medicine

Seminars in Veterinary Medicine

Other resources

Study Guide for the ANZCVS Fellowship Examination in Veterinary Dermatology produced by and available from the Dermatology Chapter.

APPENDIX 1 - Activity Log Summary by Disease and Species:

Veterinary Dermatology

Activity Log Summary (by disease and species)

Name:

Date:

Category	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Current Total	Previous Total	Cumulative Total
Immune mediated															
Canine															
Feline															
Bovine															
Equine															
Other species															
Hypersensitivity															
Canine															
Feline															
Bovine															
Equine															
Other species															
Infectious															
Canine															
Feline															
Bovine															
Equine															
Other species															

Category	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Current Total	Previous Total	Cumulative Total
Endocrinopathies															
Canine															
Feline															
Bovine															
Equine															
Other species															
Neoplasia															
Canine															
Feline															
Bovine															
Equine															
Other species															
Hereditary Congenital															
Canine															
Feline															
Bovine															
Equine															
Other species															
Metabolic and Nutritional															
Canine															
Feline															
Bovine															
Equine															
Other species															

Category	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Current Total	Previous Total	Cumulative Total
Environmental															
Canine															
Feline															
Bovine															
Equine															
Other species															

APPENDIX 2 - Activity Log Summary by Procedure:

Activity Log Summary (by procedure)

Veterinary Dermatology

Name:

Date:

Category	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Current Total	Previous Total	Cumulative Total
Skin Biopsy (any location) Nail Bed Biopsy Otoendoscopy (GA Ear clean) Myringotomy Intradermal testing															

APPENDIX 3

Learning Outcomes for Training in Related Disciplines

Throughout the 96 week training program, the Fellowship candidate in Veterinary Dermatology must be exposed to and actively involved in training in several related disciplines. The Fellowship candidate is encouraged to develop a working relationship with one or more specialists in each discipline to facilitate regular discussion and interaction regarding case management. In addition, involvement and participation of a specialist in these disciplines in clinical rounds and seminars attended by the Fellowship candidate is encouraged, as is participation of the Fellowship candidate in relevant rounds and seminars specific to this discipline. The Fellowship candidate must ensure that this time is spent effectively in consolidating knowledge and skills and in covering aspects of this discipline that will not be addressed adequately during the remainder of their program. The Fellowship candidate is expected to be proactive in searching out opportunities, materials and expert tuition and in compiling and organizing relevant material for future reference.

Training in the related discipline of small animal medicine

The 80 hours (2 weeks) must be directly supervised by a Fellow of the ANZCVS (Small Animal Medicine, Canine Medicine or Feline Medicine), or a Diplomate of the ECVIM or ACVIM, or exceptionally- and with prior approval from the credentials committee- another recognised expert. **The role of the supervisor is to provide guidance and training in internal medicine as it applies to veterinary dermatology patient.**

Essential techniques/topics the candidate should gain practical experience with, include but are not limited, to the following:

1. exposure to medical conditions with dermatological manifestation of disease e.g. endocrine diseases, infectious diseases and medical conditions that may affect the patient during anaesthesia, surgery or recovery
2. the development of a broad view of veterinary medical patient evaluation and their dermatological implications
3. the formulation of treatment plans that encompass the medical needs of veterinary patients
4. the indication for laboratory and other diagnostic tests and interpretation of their results
5. monitoring the patient's response to treatment and modifying treatment as indicated

Training in the related discipline of veterinary dermatopathology

The 80 hours (2 weeks) of histopathology training must be directly supervised by a Fellow of the ANZCVS in dermatology or pathology, Diplomate of the European or American college of Pathology or, exceptionally and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in dermatohistopathology.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Normal comparative histological anatomy and embryology
2. Dermatological cytology
3. Histopathological patterns of common dermatological diseases
4. Special histopathological tests such as special stains, immunohistochemistry, immunofluorescence.

Training in the related discipline of small animal or large animal surgery

The 80 hours (2 weeks) must be directly supervised by a Fellow of the ANZCVS (Small Animal or Large Animal Surgery), or a Diplomate of the ECVS or ACVS, or, exceptionally and with prior approval from the credentials committee, another recognised expert. The role of the supervisor is to provide guidance and training in surgery as it applies to veterinary dermatology patient.

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Participation in small animal or large animal surgical cases involving the skin and ear
2. An understanding of the underlying principles of surgery including, but not limited to: asepsis, haemostasis, tissue handling, wound healing, wound infection and antibiotic therapy
3. Formulation of a treatment plan that encompasses the surgical and anaesthesia requirements of the patient
4. Indications for and use of other diagnostic modalities e.g MRI and CT and the interpretation of these results
5. Monitoring the patient's response to treatment and modifying treatment as indicated
6. Evaluation of the patient during anaesthesia, surgery and recovery
7. Biopsy techniques.

Training in the related discipline of veterinary diagnostic imaging

The 40 hours (1 week) of veterinary diagnostic imaging must be directly supervised by a Fellow of the ANZCVS (Diagnostic Imaging), Diplomate of the ECVDI or ACVR, or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in diagnostic imaging as it applies to the veterinary dermatology patient.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Radiography and ultrasonography including digital radiography of the head and ears
2. Computed tomography (CT) and magnetic resonance imaging (MRI) of head and ears

Training in the related discipline of veterinary oncology

The 40 hours (1 week) of veterinary oncology must be directly supervised by a Fellow of the ANZCVS, Diplomate of the ECVIM or ACVIM or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in veterinary oncology as it applies the veterinary dermatology patient.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Aetiopathogenesis, epidemiology, pathology, diagnosis, treatment and management measures for common oncological diseases of small animal and large animal patients.
This should include exposure to surgical principles generally, and specifically in relation to oncology
2. Cytology and histopathology of neoplasia

Training in the Related Discipline of veterinary anaesthesia and critical care (small animals)

The 40 hours (1 week) of veterinary anaesthesia and critical care must be directly supervised by a Fellow of the ANZCVS, Diplomate of the ECVIM (if present at time of candidate's training) or ACVECC or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in veterinary anaesthesia and critical care.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Critical care
 - 1.1. Fluid and electrolyte disorders and their therapy

- 1.2. Management of patients with special needs e.g. diabetic patients, animals affected by endocrine disease and small animals with kidney or liver disease
- 1.3. Cardiac failure and resuscitation
2. Pain management
 - 2.1. Basic physiology of acute and chronic pain
 - 2.2. Recognition and monitoring of pain in surgical patients
 - 2.3. Prevention and control of pain: pre-emptive analgesia, post-operative analgesic techniques, management of acute (including post-operative) and chronic pain
3. Anaesthesia
 - 3.1. Pre-operative assessment and patient preparation: pre-anaesthetic evaluation and premedication
 - 3.2. Equipment used in general anaesthesia delivery and monitoring
 - 3.3. Drugs used for sedation/ tranquilization, analgesia and anaesthesia, and their application in small animal patients
 - 3.4. Application of analgesic techniques before, during and after a surgical procedure and knowledge of their influence on the course of anaesthesia
 - 3.5. Anaesthesia induction, maintenance and recovery techniques in small animal surgery patients
 - 3.6. Airway maintenance, oxygenation and ventilation, acute respiratory failure
 - 3.7. Special anaesthetic considerations: anaesthesia of the neonate, geriatric patient and veterinary patients with special needs eg patients affected by endocrine disease, renal disease, cardiac disease and liver disease
 - 3.8. Monitoring during anaesthesia, effects on the respiratory and CV systems and support of these systems during anaesthesia
 - 3.9. Prevention and management of anaesthetic accidents and crises
 - 3.10. Local and regional anaesthesia techniques used in small animals

Training in the related discipline of human dermatological training

The 40 hours (1 week) of human dermatological training must be directly supervised by a Fellow of the Australasian College of Dermatology (FACD) or equivalent qualifications from the American or European colleges or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in human dermatology.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. The aetiology, pathogenesis, pathophysiology, diagnosis, differential diagnosis and treatment of dermatological diseases in humans.
2. Principles of dermatological pharmacology and therapeutics
3. Dermatological diagnostic procedures
4. Principles of human dermatological surgery
5. Aspects of human dermatological research and clinical dermatology that have relevance to dermatology of domestic animal species.

Training in the related discipline of human clinical immunological training

The 40 hours (1 week) of human clinical immunological training must be directly supervised by a Fellow of the Royal Australasian College of Physicians (FRACP) who has done further training in immunology and allergy or the equivalent qualifications from the American or European colleges or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in human clinical immunology and allergy.**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. **The** aetiology, pathogenesis, pathophysiology, diagnosis, differential diagnosis and treatment of allergic diseases in humans
2. Principles of pharmacology and therapeutics for allergic disease in humans
3. Diagnostic testing procedures for allergic diseases in humans
4. Aspects of research in clinical immunology and allergy that have relevance to dermatology of domestic animal species.

Training in the related discipline of human dermatohistopathology

The 40 hours (1 week) of human dermatohistopathology training must be directly supervised by a Fellow of the Royal College of Pathologists Australasia (FRCPA) who has done further training in dermatohistopathology or equivalent qualifications from the American or European colleges or exceptionally - and with prior approval from the credentials committee - another recognised expert. **The role of the supervisor is to provide guidance and training in human dermatohistopathology**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Histopathological patterns of common dermatological diseases
2. Techniques utilised in dermatohistopathology including special stains, immunofluorescence, immunohistochemistry, clonality studies or other specific tests utilised in histopathology for the diagnosis of certain dermatological diseases

Training in the Related Discipline of laboratory animal medicine

The 40 hours (1 week) of laboratory animal medicine must be directly supervised by a Fellow of the ANZCVS (if present at time of candidate's training), Diplomate of the ECLAM or ACLAM or exceptionally, and with prior approval from the credentials committee, another recognised expert. **The role of the supervisor is to provide guidance and training in laboratory animal medicine**

Essential techniques/topics the candidate should gain practical experience with include but are not limited to the following:

1. Understanding the handling, examination and medicating techniques related to the species being studied
2. Gaining an understanding of the most important diseases affecting the species being studied
3. Formulating of a differential diagnosis list for relevant conditions
4. Formulating of a treatment plan
5. Monitoring the response to treatment and modifying treatment as indicated
6. Indications for laboratory and other diagnostic tests and interpretation of results

FURTHER INFORMATION

For further information contact the College Office

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