



AUSTRALIAN AND NEW ZEALAND COLLEGE OF VETERINARY SCIENTISTS

FELLOWSHIP GUIDELINES

Veterinary Anaesthesia and Analgesia

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 the Fellowship examination.
3. Membership must be in Veterinary Anaesthesia and Analgesia or pre-2017 membership in Veterinary Anaesthesia and Critical Care.

OBJECTIVES

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

LEARNING OUTCOMES

1. The candidate will have a **detailed**¹ knowledge of:
 - 1.1. The physiology of all body systems, including the changes induced by anaesthesia or sedation, with emphasis on the cardiovascular, respiratory, endocrine, renal, hepatic, nervous systems and the neuromuscular junction.
 - 1.1.1. Fluid electrolyte and acid base balance
 - 1.1.2. Pregnancy and the foetus

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.

- 1.1.3. Neonates, paediatric and geriatric patients
- 1.1.4. Pain
- 1.1.5. The stress response.
- 1.2. The principles of pharmacology relevant to the science of anaesthesia and analgesia:
 - 1.2.1. Physicochemical properties and the formulation of drugs
 - 1.2.2. Pharmacokinetics, including biotransformation of drugs
 - 1.2.3. Pharmacodynamics, including drug receptor interactions; variability in individual responses, drug interactions and adverse reactions to drugs and their management.
- 1.3. Anaesthetic equipment:
 - 1.3.1. The components and function of anaesthetic machines, circuits and common ventilators
 - 1.3.2. Principles of the use of anaesthetic monitoring systems and resuscitation equipment, and methods for checking their performance
 - 1.3.3. Principles of physics as they apply to anaesthetic equipment.
- 1.4. The principles and practice of sedation, anaesthesia and pain management of a wide range of species including domestic animals (dogs, cats, horses) production animals (cattle, sheep, goat, alpaca, llama, pigs); wild exotic and unusual animals (zoo animals, marsupials, unusual pets, fish, birds and reptiles); laboratory animals for a wide range of surgical and medical procedures. This should include:
 - 1.4.1. Pre-anaesthetic patient examination, assessment, and premedication
 - 1.4.2. Induction and maintenance of anaesthesia
 - 1.4.3. Appropriate measurement and interpretation of physiological variables during anaesthesia, recovery and post operative management
 - 1.4.4. Indications and drugs used for neuromuscular blockade, and methods for monitoring their effect
 - 1.4.5. Effects of intermittent positive pressure ventilation including commonly used modes of ventilation (e.g. IPPV and PCV, PEEP, CPAP)
 - 1.4.6. Knowledge of various anaesthesia recovery techniques used in species such as horses, cattle and ruminants
 - 1.4.7. The provision of pre-, intra- and postoperative analgesia
 - 1.4.8. Capture, physical restraint and chemical immobilisation of various species including captive and free ranging animals.

- 1.5. The principles and practice of local and regional analgesia including:
 - 1.5.1. Techniques of local, regional, epidural and spinal analgesia of animals, and associated complications and their management
 - 1.5.2. Anatomical location of peripheral nerves for regional nerve blocks and spinal cord and associated structures involved for spinal and epidural techniques
 - 1.5.3. Physiology of pain sensation, development of hyperesthesia and neuropathic pain.
- 1.6. Anaesthetic complications:
 - 1.6.1. Complications associated with sedation, general anaesthesia, local, regional and spinal anaesthesia, neuromuscular blockade and their management
 - 1.6.2. Causes, assessment and performance of cerebral cardiopulmonary resuscitation in anaesthetised patients.
- 1.7. Occupational health and environmental hazards:
 - 1.7.1. Pollution of theatre atmosphere, health hazards to personnel of drugs including injectable as well as inhalational and environmental hazards of anaesthetic gases and vapours; methods for minimising theatre atmosphere pollution
 - 1.7.2. Storage and handling of gases and vapours to prevent fires and explosions
 - 1.7.3. Electrical safety including isolation (earthing) of patient from monitoring equipment, construction of floors, tables etc.
2. The candidate will have a **sound** knowledge of:
 - 2.1. The principles and practice of general medicine and surgery including:
 - 2.1.1. The changes in physiology and organ function associated with medical and surgical disease and how these changes impact on anaesthetic management
 - 2.1.2. How specific therapy for medical disease may interact with anaesthetic agents and subsequently alter the anaesthetic protocol
 - 2.1.3. EMG and EEG as related to the science of anaesthesia and analgesia.
 - 2.2. The intensive care of critically ill patients requiring anaesthesia, including:
 - 2.2.1. Investigation, management and monitoring
 - 2.2.2. Pathophysiological changes that occur during malfunction and failure of major body systems and how these affect anaesthetic management

- 2.2.3. Principles of cardiopulmonary cerebral resuscitation, including complications expected and management in the post-resuscitation period
- 2.2.4. Assessment and management of the traumatised patient including pain management
- 2.2.5. Blood transfusion medicine.
- 2.3. The principles of experimental design and statistical analysis including common parametric and non-parametric statistical analyses of data and the significance of the results.
3. The candidate will have a **basic** knowledge of:
 - 3.1. Diagnostic imaging including radiographic imaging and the use of contrast techniques; ultrasonic examination, particularly echocardiography, magnetic resonance imaging, computer tomography, scintigraphy with an understanding of how these techniques affect the anaesthetic management (drugs, analgesic and fluid requirements) and monitoring of the patient
 - 3.2. The principles of physics and chemistry for anaesthesia and analgesia including:
 - 3.2.1. The physics and chemistry relevant to biological systems, atomic and molecular structure, pH, acids, bases, and buffers
 - 3.2.2. The kinetic theory of gases and relevant gas laws as they apply to anaesthesia
 - 3.2.3. The measurement of physiological variables and their interpretation
 - 3.2.4. The main biochemical pathways for carbohydrate, protein and fat metabolism; how these are altered by disease and an understanding of how these abnormalities can affect anaesthetic management.
 - 3.3. The anatomy relevant for general and local anaesthesia and analgesia including relevant comparative anatomic features in the different species
 - 3.4. The pathology of systems that affect anaesthesia, in particular changes affecting cardiovascular, respiratory, central nervous system, renal and hepatic and endocrine systems
 - 3.5. The potential for abuse and addiction of humans to drugs used in veterinary anaesthesia
 - 3.6. The design and planning of experiments relevant to anaesthesia and the related basic sciences.
4. The candidate will, with **detailed**² expertise, be able to:

² **Skill levels:**

Detailed expertise — the candidate must be able to perform the technique with a high degree of skill, and have extensive experience in its application. The highest level of proficiency.

Sound expertise — the candidate must be able to perform the technique with a moderate degree of skill, and have moderate experience in its application. A middle level of proficiency.

- 4.1. Review the diagnostic work up and management of medical and surgical conditions that are likely to require anaesthesia
- 4.2. Interpret clinical haematological, biochemical and other data results from laboratory analyses of blood, serum, urine and other samples from small and large animal patients for pre-anaesthetic assessment
- 4.3. Recognise and interpret relevant features in radiographic (plain films and films taken using various contrast techniques) and ultrasonic examinations to assess function of major body systems relevant to anaesthesia, particularly the cardiopulmonary system
- 4.4. Record and interpret electrocardiograms and have knowledge of the management of common dysrhythmias
- 4.5. Perform arterial and venous catheterisation , including placement of central venous catheter in a range of species
- 4.6. Perform local and regional nerve blocks, including epidural and spinal techniques, in small and large animals
- 4.7. Perform orotracheal and nasotracheal intubation, and tracheostomy
- 4.8. Administer continuous infusions
- 4.9. Use anaesthetic monitoring equipment including electrocardiogram, invasive and non-invasive blood pressure (both arterial and central venous); endtidal gas monitoring, including capnography; nerve stimulators, pulse oxymetry, thermometers
- 4.10. Perform positive pressure ventilation
- 4.11. Use neuromuscular blocking agents
- 4.12. Perform emergency cardiopulmonary cerebral resuscitation
- 4.13. Manage pain in veterinary patients.

Basic expertise — the candidate must be able to perform the technique competently in uncomplicated circumstances.

EXAMINATIONS

Refer to the *Fellowship Candidate Handbook*, Section 5. 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 (two hours)
- 4. Oral Examination** (*Component 4*)
Oral (two hours)

The written examination will comprise of two separate three-hour written papers taken on two consecutive days. There will be an additional 20 minutes perusal time for each paper, during which no writing in an answer booklet is permitted. In each paper you are provided with six (6) questions to answer, worth 30 marks each, giving a total of 180 marks per paper. There is no choice of questions. Questions may be long essay type or a series of small sub-questions. Marks allocated to each question and to each subsection of questions will be clearly indicated on the written paper.

Written Paper 1:

This paper is designed to test the candidate's knowledge of the principles of Anaesthesia and Analgesia 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.

Written Paper 2:

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

Practical Examination:

The practical examination is designed to test practical aspects of the learning Objectives. To pass this examination, candidates must be able to discuss complex case presentations and interpret the results of diagnostic tests. Candidates must demonstrate deep understanding and practical application of equipment used in anaesthesia and Analgesia. Written answers will be required. No perusal time will be given for the practical exam. The practical will consist of a series of twenty questions with sub-questions, equating to a total of 120 marks. Marks allocated to each question and to each sub-section will be clearly indicated on the written paper. Images of equipment, drugs, animals, diagnostic images (such as radiographs, CT and MRI), laboratory test results, electrocardiographs, and/or respiratory function tests are likely to be used during this examination.

Oral Examination:

The oral examination is designed to test practical aspects of the Learning Objectives. To pass this examination, the candidate must be aware of current literature and be able to debate on controversial issues. Six (6) cases are presented with supporting questions asked verbally in a face-to-face setting. The oral examination has a total of 120 marks with each case allocated 20 marks. Images of equipment, drugs, animals, diagnostic images (such as radiographs, CT and MRI), laboratory test results, electrocardiographs, and/or respiratory function tests are likely to be used during this examination.

TRAINING PROGRAMS

Refer to the *Fellowship Candidate Handbook*, Section 3.3.

1. The training program must provide intensive training in Veterinary Anaesthesia and Analgesia under direct supervision at specialist referral level.
2. The training program requires 144 weeks (3 years) of directly supervised training (DST) (at least 35 hours each week) at an approved facility.

TRAINING IN RELATED DISCIPLINES

Refer to the *Fellowship Candidate Handbook*, 2.4.2.

Candidates for Fellowship in Veterinary Anaesthesia and Analgesia must spend at least 6 of the 144 weeks supervised time in the related disciplines training as per the following:

- Emergency and Critical Care (2 weeks)
- Diagnostic Imaging (2 weeks)
- Other* (2 weeks)

Related disciplines training must be undertaken with a person with specialist level qualifications (Diplomat or Fellow) in that discipline, or other person approved by the TCC.

**TRD in cardiology is encouraged*

EXTERNSHIPS

Refer to the *Fellowship Candidate Handbook*, Section 2.4.1.

All candidates must complete at least two (2) externships of a minimum of two weeks in Veterinary Anaesthesia and Analgesia to allow exposure to other people with specialist qualifications (e.g. Diplomat or Fellow), facilities and a greater range of cases.

ACTIVITY LOG SUMMARY

The Activity Log Summary (ALS) must be recorded throughout supervised training in the primary discipline. Examples of Activity Log Summary entries are included in Appendix 1. The templates for the ALS must be submitted for approval with the Training Program document.

Cases in the ALS should be categorised according to:

- Species
- Body system categories
- Technical procedures carried out by the candidate
- ASA classification.

Categories for the ALS by Body System are as follows:

- Central Nervous System: Brain/Spinal Cord Surgery and Diagnostics
- Respiratory System — Upper Surgery
- Respiratory System — Upper Diagnostic
- Respiratory System — Lower Surgery
- Respiratory System — Lower Diagnostic
- Cardiac System — including Vascular
- Urogenital
- Head and Neck
- Skin/Reconstructive
- Orthopaedic
- Gastrointestinal
- Pancreatic and Hepatic
- Abdomen — other (adrenal, spleen, etc.)
- Perineal

Every animal undergoing a procedure should be noted in the ALS. It is acknowledged that one anaesthetic case may fit into more than one category (e.g. a laparotomy for closure of portosystemic shunt could be vascular and abdominal and then should be listed in both lists).

ANAESTHETIC RECORD LOG (ARL)

An ARL must be documented for a minimum of 300 animals that the candidate has anaesthetised as the primary clinician. At least 100 cases should be general anaesthesia in small (companion) animals, 100 cases should be general anaesthesia in horses, 20 cases should be general anaesthesia in farm animals (cattle, pigs, sheep, goats and small camelids [at least one of each species and a maximum of 10 of any one species]) and 10 cases should be general anaesthesia in wildlife, exotic and avian patients (at least 3 species). Animals anaesthetised for research purposes can be included in the ARL. These animals must have recovered from the procedure and this proportion of cases should not exceed 25% of the cases in any of the species categories.

Records should include a contents page and be organised by species (dog/cat/horse/farm animals/other) and each species subdivided for body systems listed above (e.g. orthopaedic, lower respiratory, abdomen, etc.) A template with all the required information has been provided in Appendix 2.

Both the candidate and the supervisor are required to sign a cover page to the ARL (Appendix 3) stating that all of the anaesthetic records, when submitted, were cases anaesthetised as part of the residency training. A general index for 300 cases must also be included with submissions. A template for this document is available in Appendix 4.

The ARL should be submitted along with the ALS each year during the training program as part of the Annual Candidate Report. Both ARL and ALS should be submitted formatted in Excel documents.

PUBLICATIONS AND PRESENTATION

Refer to the *Fellowship Candidate Handbook*, Section 2.10.

Two first author publications are required along with one presentation (oral) at a national (e.g. College Science Week) or international anaesthesia and/or analgesia conference. The publications must relate to Veterinary Anaesthesia and Analgesia.

RECOMMENDED READING LIST

The candidate is expected to research the depth and breadth of the knowledge of the discipline. The reading list below is very extensive and is intended as a guide to the candidate to some core references and source material. The list is not intended as an indicator of the content of the examination. Books are regularly updated and the most current edition should be sourced.

The relevant references are the most recent editions of the following texts and the most recent years of the journals (i.e. all journals published since the last issue of the relevant texts).

Core Textbooks³

A. Basic Sciences Applied to Anaesthesia

1. Physiology (including biochemistry) and anatomy

All You Really Need to Know to Interpret Arterial Blood Gases (1999, 1st ed., Martin)

Basic Physiology for Anaesthetists (2015, 1st ed., Chambers)

2 Pharmacology

Pharmacology for Anaesthesia and Intensive Care (2014, 4th ed., Peck)

3. Biophysics and clinical measurement

Physics in Anaesthesia (2012, 1st ed.. Middleton)

B. The Practice of Anaesthesia, Analgesia and Intensive Care.

4. Clinical anaesthesia

BSAVA Manual of Canine and Feline Anaesth. and Analg. (2007, 2nd ed., Seymour)

Veterinary Anesthesia and Analgesia, Lumb and Jones (2015, 5th ed., Tranquili)

Manual of Equine Anesthesia and Analgesia (2006, 1st ed., Doherty)

5. Anaesthesia in research

Laboratory Animal Anaesthesia (2009, 3rd ed., Flecknell)

6. Analgesia

Chronic Pain in Small Animals medicine (2012, 1st ed., Wiley)

Handbook of Veterinary Pain Management (2014, 3rd ed., Gaynor)

7. Intensive / critical care

Small Animal Critical Care Medicine [Selected Chapters] (2014, 2nd ed., Silverstein)

Recommended Textbooks

A. Basic Sciences Applied to Anaesthesia

General

Anesthesia Secrets (2015, 5th ed., Duke)

Foundations of Anesthesia: Basic science and clinical practice (2005, 2nd ed., Hemmings)

Miller's Anesthesia (2014, 8th ed., Miller)

Physics, Pharmacology and Physiology for Anaesthetists: Key Concepts for the FRCA (2014, 2nd ed., Cross)

³ Definitions of Textbooks

Core textbook – candidates are expected to own a copy of the textbook and have a detailed knowledge of the contents.

Recommended textbook – candidates should own or have ready access to a copy of the book and have a sound knowledge of the contents.

Additional references – candidates should have access to the book and have a basic knowledge of the contents.

1. Physiology (including biochemistry) and anatomy

Anatomy for Anaesthetists (2013, 9th ed., Ellis)
Arterial Blood Gases made Easy (2007, 1st ed., Hennessey)
Cunningham's Textbook of Veterinary Physiology (2012, 5th ed., Klein)
Nunn's Applied Respiratory Physiology (2010, 7th ed., Lumb)
Principles of Physiology for the Anaesthetist (2015, 3rd ed., Kam)
Respiratory Physiology: the Essentials (2011, 9th ed., West)
The Cardiorespiratory System: Integration of Normal and Pathological Structure and Function (1999, 1st ed., King)

2. Pharmacology

Drugs in Anaesthesia and Intensive Care (2011, 4th ed., Smith)
Goodman and Gilman's The Pharmacological Basis of Therapeutics (2011, 12th ed., Brunton)
Lippincott's illustrated reviews: Pharmacology (2014, 6th ed., Whalen)
Pharmacology and Physiology for Anesthesia: Foundations and Clinical Application (2013, 1st ed., Hemmings)
Pharmacology of Pain (2010, 1st ed., Beaulieu)
Principles and Practice of Pharmacology for Anaesthetists (2008, 5th ed., Calvey)
Veterinary Anesthesia Drug Quick Reference (2004, 1st ed., Blaze)
Veterinary Pharmacology and Therapeutics (2009, 9th ed., Riviere)

3. Biophysics and clinical measurement

Basic Physics and Measurement in Anaesthesia (2003, 1st ed., Davis)
Equipment in Anaesthesia and Critical care (2013, 1st ed., Aston)
Essentials of Anaesthetic Equipment (2013, 4th ed., Al-Shaikh)
Fundamentals of Anaesthesia for the FRCA: Physics, Clinical Measurement and Equipment (2011, 2nd ed., Magee)
The MGH Textbook of Anesthetic Equipment (2012, 1st ed., Sandberg)
Understanding Anesthesia Equipment (2007, 5th ed., Dorsch)
Ward's Anaesthetic Equipment (2012, 6th ed., Davey)

Statistics

Mathematics and Statistics in Anaesthesia (1998, 1st ed., Cruickshank)
Statistics for Veterinary and Animal Science (2013, 3rd ed., Petrie)

B. The Practice of Veterinary Anaesthesia, Analgesia and Intensive Care.

4. Clinical anaesthesia

Anesthesia and Analgesia in Laboratory Animals (2008, 2nd ed., Fish)
Anesthesia of Exotic Pets (2008, 1st ed., Longley)
Canine and Feline Anesthesia and Co-existing Disease (2014, 1st ed., Snyder)
Equine Anesthesia: Monitoring and Emergency Therapy (2008, 2nd ed., Muir)
Essentials of Small Animal Anesthesia and Analgesia (2011, 2nd ed., Grimm)
Farm Animal Anesthesia: cattle, Small Ruminants, Camelids and Pigs (2014, 1st ed., Lin)

Handbook of Equine Anaesthesia (2007, 2nd ed., Taylor)
Handbook of Veterinary Anesthesia (2012, 5th ed., Muir)
Handbook of Wildlife Chemical Immobilization (2007, 1st ed., Kreeger)
Restraint and Handling of Wild and Domestic Animals (2008, 3rd ed., Fowler)
Veterinary Anaesthesia (2013, 11th ed., Clarke)
Veterinary Anesthesia and Pain Management Secrets (2002, 2nd ed., Greene)
Zoo Animal and Wildlife Immobilization and Anesthesia (2014, 2nd ed., West)

5. Analgesia

Animal Pain: A Practice-Oriented Approach to an Effective Pain Control in Animals (2000, 1st ed., Hellebrekers)
Pain in Horses: Physiology, Pathophysiology and Therapeutic Implications, an Issue of Veterinary Clinics: Equine (2010, 26(3), Muir)
Pain Management and Anesthesia, An Issue of Veterinary Clinics: Equine (2002, 18(1), Mama)
Pain Management in Animals (2001, 1st ed., Flecknell)
Pain Management in Small Animal Medicine (2013, 1st ed., Fox)
Pain Management in Veterinary Practice (2013, 1st ed., Egger)
Small Animal Regional Anesthesia and Analgesia (2013, 1st ed., Campoy)
Update on Management of Pain, An Issue of Veterinary Clinics: Small Animal Practice (2008, 38(6), Matthews)

6. Intensive / critical care

Advanced Monitoring and Procedures for Small Animal Emergency and Critical Care (2012, 1st ed., Burkitt)
BSAVA Manual of Canine and Feline Emergency and Critical Care (2007, 2nd ed., King)
Veterinary Emergency Medicine Secrets (2000, 2nd ed., Wingfield)

7. Medicine, surgery and pathology

Anesthesiologist's Manual of Surgical Procedures (2009, 4th ed., Jaffe)
Medicine for Anaesthetists (1999, 4th ed., Vickers)

Scientific Journals with relevant article material⁴

Core Journals

- Veterinary Anaesthesia and Analgesia

⁴ Definitions for journals:

Core Journal – candidates are expected to have ready access to either print or electronic versions of the journal and have a detailed knowledge of the published articles in the subject area.

Recommended Journal – candidates should have ready access to either print or electronic versions of the journal and have a sound knowledge of the published articles in the subject area.

Additional Journal – candidates should be able to access either printed or electronic versions of the journal and have a basic knowledge of the published articles in the subject area.

Additional Reading Materials - These are conference proceedings, other non-refereed publications and other journals that would offer some information in the subject area including differing points of view, but are not required reading.

- Veterinary Clinics of North America
- Journal of Veterinary Emergency and Critical Care
- BJA Education (*formerly Continuous Education in Anesthesia, CC and Pain*)

Recommended Journals

- American Journal of Veterinary Research
- Compendium: Continuing Education for Veterinarians
- Equine Veterinary Journal
- JAAHA: Journal of the American Animal Hospital Association
- JAVMA: Journal of the American Veterinary Medical Association
- JSAP: Journal of Small Animal Practice
- Journal of Veterinary Internal Medicine
- Journal of Veterinary Pharmacology and Therapeutics
- Journal of Zoo and Wildlife Medicine
- Veterinary Medicine
- Veterinary Record
- Veterinary Surgery
- Acta Anaesthesiologica Scandinavica
- Anaesthesia
- Anesthesia and Analgesia
- Anesthesiology
- ASA Refresher Courses
- British Journal of Anaesthesia

Internet link with relevant material for examination preparation

- ANESTHESIA UK (www.anaesthesiauk.com)

FURTHER INFORMATION

For further information contact the College Office

Telephone: International +61 (07) 3423 2016

Email: examinations@anzcvcs.org.au

Web: www.anzcvcs.org.au

Postal Address: Building 3, Garden City Office Park, 2404 Logan Road
EIGHT MILE PLAINS QLD 4113 Australia

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Appendix 1: Activity Log Summaries (*Templates*) - (4 required in total)

1. By Species

NAME:	SUBJECT: Veterinary Anaesthesia & Analgesia												DATE: Jan 2018 -- Dec 2018		
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Current total	Previous total	Cumulative total
Canine	13	2	11	8	18	18	9	9	18	5	7	0	118	215	333
Feline															
Equine															
Ruminants	5	0	1	7	1	3	7	4	2	0	0	1	31	62	93
Captive/free ranging wildlife															
Exotic companion and lab animals	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
Current total	18	2	12	15	19	21	16	13	20	5	7	1			
Previous total	282	300	302	314	329	348	369	385	398	418	423	430			
Cumulative total	300	302	314	329	348	369	385	398	418	423	430	431	149	282	431

2. By Body System Category

NAME:	SUBJECT: Veterinary Anaesthesia & Analgesia												DATE: Jan 2018 -- Dec 2018		
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Current total	Previous total	Cumulative total
CNS system-brain/spinal cord	0	0	0	0	1	1	0	1	1	0	1	0	5	12	17
Respiratory system -upper	0	1	1	1	0	1	2		1	0	0	0	7	7	14
Respiratory system -lower	7	0	0	5	3	2	7	4	4	1	0	1	34	53	87
Cardia system- inc vascular	0	0	3	1	1	1	0	1	2	0	0	0	9	14	23
Urogenital	4	0	0	0	2	4	0		1	1	1	0	13	20	33
Head and neck	4	0	1	3	1	4	3	3	1	2	0	0	22	41	63
Skin or reconstructive	2	0	3	2	5	1	1	2	1	1	2	0	20	43	63
Gastrointestinal															
Pancreatic and hepatic															
Abdomen -other (adrenal, spleen)															
Perineal															
Endoscopies															
Orthopaedic	1	1	4	3	6	7	3	2	9	0	3	0	39	92	131
Current total	18	2	12	15	19	21	16	13	20	5	7	1			
Previous total	282	300	302	314	329	348	369	385	398	418	423	430			
Cumulative total	300	302	314	329	348	369	385	398	418	423	430	431	149	282	431

3. By Technical Procedure

NAME:	SUBJECT: Veterinary Anaesthesia & Analgesia												DATE: Jan 2018 -- Dec 2018		
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Current total	Previous total	Cumulative total
direct arterial line															
central venous line															
PICC															
epidural															
epidural catheter															
urinary catheter															
difficult airway															
tracheostomy															
one lung intubation															
Regional anaesthesia:															
- blind															
- using nerve stimulator															
- using US guidance													0		
Current total	0	0	0	0	0	0	0	0	0	0	0	282			
Previous total	282	282	282	282	282	282	282	282	282	282	282	282	0	0	0
Cumulative total	282	282	282	282	282	282	282	282	282	282	282				

4. By ASA Case Number

ASA rating for general anaesthesia > 15 minutes					
ASA	1	2	3	4	5 Emergency
accumulative total number	5	10			

Appendix 2: Anaesthetic Record Log (*Template*)

Separate Spreadsheets for Following Categories: Cats, Dogs, Horses, Food Animals, Other Species - (5 required in total)

Example of Anaesthetic Record Log - Veterinary Anaesthesia and Analgesia																
Separate spreadsheet for following categories: Cats, Dogs, Horses, Food Animals, Other species																
Date	Case number	Patient	Category	Breed	Age	Sex	ASA # add if emergency	Procedure	Premed	Induction	Maintenance	Complication	Outcome	Comments	Primary	Supervised
1/1/20	1232345	Beau Beau	CNS system- brain/spinal cord	Cavalier KCS			ASA 1	Hemilaminectomy	Acp and methadone	Propofol	Isoflurane	Hypothermia	Successful recovery		Yes	Yes Dr Super
2/2/20	12346	Fee Fox	Respiratory system - upper	Persian			ASA 2	Laryngeal examination	Butorphanol	Alfaxalone	Isoflurane	Nil	Successful recovery		Yes	none
3/2/20	12347	DF Smart	Respiratory system - lower	German Shepherd			ASA 3	Bronchoscopy	Acp and morphine	Midazolam and Ketamine	Propofol TIVA	Hypoxaemia transient	Required bronchodilators & oxygen		Yes	Yes Dr Do
			Cardiac system - inc vascular	Jack Russell Terrier			ASA 4	Patent Ductus Arteriosus ligation		Sevoflurane	Sevoflurane	Bradycardia transient	Successful recovery		Yes	Yes Dr Tee
			Urogenital				ASA 5	Cystoscopy								
			Head & neck													
			Skin or reconstructive													
			Gastrointestinal Pancreatic & hepatic													
			Abdomen- other (adrenal, spleen)													
			Perineal													
			all 'scopies'													
			Orthopaedic													

Appendix 3: Cover page for Anaesthetic Record Log (Template)

This cover page must be signed by both the candidate and the supervisor/s and is a compulsory part of the Anaesthetic Record Log.

The anaesthetic record log must accompany the Credentials Document if not previously pre-approved.

Name of Fellowship candidate in Veterinary Anaesthesia and Analgesia

This Anaesthetic Record Log contains details of at least 300 cases anaesthetised during Directly Supervised Training in Veterinary Anaesthesia and Analgesia of the above candidate. Indexed first by species and then by categories within species. We acknowledge that it is a true and accurate representation of some of the clinical and technical procedures that have been accomplished during training

Signed:

.....
Supervisor

.....
Date

.....
Supervisor

.....
Date

.....
Candidate

.....
Date

Appendix 4: General Index for 300 Cases (*Template*)

SUBMISSION OF 300 CASE RECORDS

Candidates NAME

General Index

HORSE ANAESTHETIC CASE RECORDS

Total number of records: ###

horses were part of an experimental study in ***, all other horses were clinical cases.

They were anaesthetised at

1. Institution 1
2. Institution 2

Division according to ASA category

ASA 1	##
ASA 2	##
ASA 3	##
ASA 4	##
ASA 5	##

FARM ANIMAL SPECIES

Total number of records: ##

animals were part of an experimental study, all other farm animals were clinical cases.

They were anaesthetised at

1. Institution 1
2. Institution 2

Division according to ASA category

ASA 1	##
ASA 2	##
ASA 3	##
ASA 4	##
ASA 5	##

NON DOMESTIC SPECIES ANAESTHETIC CASE RECORDS

Total number of records: ##

All animals were clinical cases, except ## animals, which were part of a study.

They were anaesthetised at

1. Institution 1
2. Institution 2

Division according to ASA category

ASA 1	##
ASA 2	##
ASA 3	##
ASA 4	##
ASA 5	##

DOG ANAESTHETIC CASE RECORDS

Total number of records: ##

All dogs were clinical cases.

They were anaesthetised at

1. Institution 1
2. Institution 2

Division according to ASA category

ASA 1	##
ASA 2	##
ASA 3	##
ASA 4	##

ASA 5 ##

CAT ANAESTHETIC CASE RECORDS

Total number of records: ##

All cats were clinical cases.

They were anaesthetised at

1. Institution 1
2. Institution 2

Division according to ASA category

ASA 1	##
ASA 2	##
ASA 3	##
ASA 4	##
ASA 5	##

INTENSIVE CARE CASE RECORDS

Total number of records: ##

All ICU cases were clinical cases and were treated by the candidate as first or second responsible clinician.

They were treated at

1. Institution 1
2. Institution 2

Division according to species

dogs	##
cats	##
horses	##

DEFINITION OF ASA CATEGORIES FOR ANAESTHETIC RECORD LOG

Category	Physical Status
ASA 1	normal healthy patient
ASA 2	patient with mild systemic disease
ASA 3	patient with severe systemic disease
ASA 4	patient with severe systemic disease that is in constant threat of life
ASA 5	moribund patient not expected to survive with or without surgery

Animals were assigned an ASA grade before surgery.

List of Abbreviations for Anaesthetic record log

All surgical terms are listed in the “Index of Procedures” in English

Abbreviations used in the “Index of Procedures”

ACP [acepromazine](#)

Abbreviations used in the Case Records

cri [continuous rate infusion](#)

Drug abbreviations

(You may add additional drug abbreviations as needed)

Drug	Abbrev.
atropine	Atro
glycopyrolate	Glyco
diazepam	Diaz
midazolam	Midaz
acepromazine	Ace
morphine	Mor
hydromorphone	Hydro
methadone	Metha
buprenorphine	Bupre
butorphanol	Butor
tramadol	Tram
fentanyl	Fenta
remifentanil	Remif
alfentanil	Alfent
sufentanil	Sufent
carfentanyl	Carfent
propofol	Propo
ketamine	Keta
telazol	Tela

thiopental	Thio
etomidate	Eto
lidocaine	Lido
bupivacaine	Bupi
mepivacaine	Mepi
romifidine	Romif
guaifenesin	GG
medetomidine	Med
detomidine	Deto
dexmedetomidine	Dexmed
xylazine	Xyla
romifidine	Romif
clonidine	Clon
isoflurane	Iso
sevoflurane	Sevo
desflurane	Desf
halothane	Halo
nitrogen	N2
oxygen	O2
nitrous oxide	N2O

List of Drugs / Equipment for Anaesthetic record log

PREMEDICATION:

ACEPROMAZINE

OPIOIDS

NSAID

MAINTENANCE / INDUCTION

FLUIDS:

SYMPATHOMIMETICS/ PARASYMPATHOLYTICS/CHRONATROPES

ANTIBIOTICS

OTHERS:

**USED MACHINES AND
VENTILATORS ETC.:**
