ELIGIBILITY

1. The candidate shall 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 may be in any discipline.

OBJECTIVES

To demonstrate that the candidate has sufficient training, experience, knowledge and accomplishment in Veterinary Clinical Pharmacology and that may lead to registration as a specialist in this field.

LEARNING OUTCOMES

The candidate is expected to have:

1. Extensive practical experience and accomplishment relevant to Australia or New Zealand and an understanding of Veterinary Clinical Pharmacology on a global basis.

2. Recognition as an authority in the field 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 Clinical Pharmacology.
At the completion of training, the candidate should have detailed knowledge of:

1. The veterinary clinical pharmacology in each of the following areas:
   (a) drugs affecting central and peripheral nervous systems with particular reference to pain management and restraint
   (b) drugs used in the control and management of inflammation
   (c) hormone agonists and antagonists
   (d) antimicrobial drugs, antiparasitic drugs, antifungal drugs and antiviral drugs
   (e) drugs used in the treatment of diseases of each of the following systems -
      (i) cardiovascular system
      (ii) gastrointestinal system
      (iii) urogenital system
      (iv) respiratory system
      (v) nervous system
   (f) drugs used in the treatment of neoplastic disease
   (g) drugs used to modify behaviour
   (h) adverse drug reactions and drug interactions in domestic animal species in health and disease
   (i) modes of drug presentation including novel presentation and delivery systems
   (j) chemical residue implications and avoidance

A detailed knowledge includes, but is not restricted to, an understanding of the mechanism of action of each drug and its modes of presentation as well as its application in the pathophysiological state. The physicochemical characteristics of the drugs, the drug-related effects in various species, the pharmacokinetics and disposition in various species, the therapeutic indications and potential adverse drug effects.

At the completion of training, the candidate should have sound knowledge of:

1. The pathophysiology and mechanisms of disease in domestic animal species at a standard sufficient to rationalize drug action and effect.

2. The general pharmacology involved in each of the following areas:
   (a) drug application in ophthalmology
   (b) general and local anaesthetics, skeletal muscle relaxants and fluid and electrolyte therapy
   (c) drugs used topically for the treatment of skin disorders
   (d) vitamin and mineral supplements
   (e) drugs used in the treatment of reproductive disorders
   (f) vaccines

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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.

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(g) toxins
(h) disinfectants and antiseptics

The candidate should be able to:

1. Predict drug interactions, drug adverse reactions and their treatment
2. Design, implement, analyse and interpret clinical trials
3. Evaluate pharmacotherapeutic protocols in individual animals utilising therapeutic drug monitoring and pharmacokinetics
4. Formulate dose regimens according to the manner of drug presentation based on pharmacokinetic principles and modify such regimes
5. Predict drug withholding times for drugs in food-producing animal species and racing canines and equines
6. Develop strategies for pain avoidance and the use of chemical restraints

Candidates should be able to apply their knowledge from within the context of a case scenario. Candidates should be familiar with current developments and advances in chemotherapy and pharmacotherapeutics through regular reading and previews of the appropriate publications. Candidates are expected to have detailed knowledge of the legal and regulatory aspects of drugs in either Australia or New Zealand (i.e. their own country).

EXAMINATIONS
Refer to the Fellowship Candidate Handbook, Section 7.

TRAINING PROGRAMS
Refer to the Fellowship Candidate Handbook, Section 3.3.

Candidates for Fellowship in Veterinary Applied Pharmacology (Clinical Pharmacology option) must complete at least two years of supervised training as stipulated by the Blue Book. The supervised training may be in veterinary clinical pharmacology, veterinary pharmacotherapeutics or veterinary chemotherapy.

EXTERNSHIPS
Refer to the Fellowship Candidate Handbook, Section 3.4.1.

TRAINING IN RELATED DISCIPLINES
Refer to the Fellowship Candidate Handbook, Section 3.4.2.

Candidates for Fellowship in Veterinary Applied Pharmacology (Clinical Pharmacology option) must spend time as stipulated by the Fellowship Candidate Handbook in one or more of the following related disciplines: veterinary industrial pharmacology, veterinary ophthalmology, veterinary anaesthesia and intensive care, veterinary dermatology, animal
nutrition, animal breeding and genetics, veterinary immunology, veterinary vaccinology, veterinary toxicology, veterinary public health and food hygiene.

**ACTIVITY LOG AND ACTIVITY LOG SUMMARY**
The Activity Log (AL) should be recorded using the format of the example in Appendix 1.
The Activity Log Summary (ALS) should be kept using the format of the *Fellowship Candidate Handbook*, Section 8.9 with the exception that the cells of the table show ‘Number of Weeks’ and not ‘Number of Cases’.

Categories for Section 8.6 and 8.9 are as follows:
- Veterinary clinical pharmacology
- Veterinary pharmacotherapeutics
- Veterinary chemotherapy
- Trial design, conduct and data analysis
- Government regulation of veterinary drugs

**PUBLICATIONS**
Refer to the *Fellowship Candidate Handbook*, Section 3.11.

**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.

**Veterinary Clinical Pharmacology and Pharmacotherapeutics**


**General Pharmacology**


**Pharmacokinetics**


**Veterinary Industrial Pharmacology**


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**Drug Delivery**  

**Veterinary Parasitology**  


**Clinical Trials**  


**Biostatistics**  


**Pharmacoepidemiology**  

**Pathophysiology**  

**Veterinary Medicine**  

Smith, B.P. Large Animal Internal Medicine, 3rd Edition, Mosby, St. Louis, 2002.

Current Veterinary Therapy  
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Kirk – Small Animal Practice
Robinson – Equine Practice
Howard – Food Animal Practice
Morrow - Theriogenology

**Government Regulation**

**Other Sources**
Proceedings No. 103, Post-Graduate Committee in Veterinary Science, University of Sydney, “Veterinary Clinical Toxicology”, August 1987.


**Journals**
Journal of Veterinary Pharmacology and Therapeutics
Veterinary Record
Australian Veterinary Journal
New Zealand Veterinary Journal
Journal of the American Veterinary Medical Association
American Journal of Veterinary Research
Journal of Parasitology

**FURTHER INFORMATION**
For further information contact the College Office

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# Appendix 1: Subject-specific Activity Log Template.

(Provide key for all abbreviations used eg PS = Principal Supervisor; BUS = Back-up Supervisor; PSE = Primary Supervisor for Externship; ASE = Adjunct Supervisor for Externship; PS TRD = Primary Supervisor for Training in a Related Discipline etc).

<table>
<thead>
<tr>
<th>Category</th>
<th>Training facility</th>
<th>Training period</th>
<th>Supervisor</th>
<th>Activity Outcome*</th>
<th>Initials of Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterinary clinical pharmacology</td>
<td>University 1</td>
<td>Start / finish dates</td>
<td>PS</td>
<td>Trained in drug interactions, drug adverse reactions and their treatment</td>
<td></td>
</tr>
<tr>
<td>Veterinary pharmacotherapeutics</td>
<td>University 1</td>
<td>Start / finish dates</td>
<td>BUS</td>
<td>Trained in evaluating therapeutic protocols in individual animals utilizing therapeutic drug monitoring and pharmacokinetics</td>
<td></td>
</tr>
<tr>
<td>Trial design, conduct &amp;</td>
<td>Institution 1</td>
<td>Start / finish dates</td>
<td>ASE</td>
<td>Trained in trialing a generic veterinary drug</td>
<td></td>
</tr>
<tr>
<td>data analysis</td>
<td></td>
<td></td>
<td></td>
<td>Trained in pre-market approval assessments of veterinary drugs and pharmacovigilance</td>
<td></td>
</tr>
<tr>
<td>Government regulation of</td>
<td>APVMA</td>
<td>Start / finish dates</td>
<td>PSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>veterinary drugs</td>
<td></td>
<td></td>
<td></td>
<td><em>A comprehensive report has been prepared on each of the training outcomes listed and is available for assessment on request.</em></td>
<td></td>
</tr>
</tbody>
</table>

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