

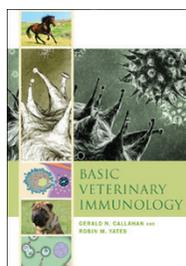
# Books

## Essentials of immunology

### Basic Veterinary Immunology

Gerald N. Callahan and  
Robin M. Yates

337 pages, paperback, \$65.  
Colorado University Press.  
2014.  
ISBN 978 1 60732 218 4



'BASIC Veterinary Immunology' provides exactly 'what it says on the tin' – a much needed, entry-level introduction to veterinary-specific immunology. Aimed at students, it fills a gap in the market and, in doing so, will be a welcome read for anyone requiring an understanding of immunology either for curriculum-based studies, or to build on basic existing knowledge.

Laid out over 337 pages, the book encompasses 18 chapters, including key areas such as the innate and adaptive immune systems. Chapter 1 (overview of mechanisms of defence) provides a snapshot of immune systems at a cellular level, but also introduces both the adaptive and innate immune systems and how they interact at a functional level. There are some excellent diagrams in this first chapter, which provide a succinct and visual guide for the student to understand key aspects – in particular the 'self' versus 'non-self' antigen recognition process (Figure 1.2, page 7).

I particularly liked the fact that the book is colour-coded at the bottom of each page, indicating a new chapter, which is helpful for cross referencing information. Throughout the book there is good use of colour plates and figures but also histological slide references, which are so useful for the student to realise what they actually see at a microscopic level (Figure 2.3 A-C, page 19 for example – epithelial barriers to microbial infection).

At the beginning of each chapter is a clinical correlations section, which provides a relevant veterinary problem and invites the reader to use knowledge gained from the chapter to evaluate the scenario described from an immunological point of view. While this has merit, I cannot help but think it would have been more usefully placed at the end of each chapter, once the reader had absorbed the pertinent information. Worthy of comment is the lack of bias towards any particular species; there are examples for both small and large animals.

Chapter 12, 'B-Cell activation and differentiation', provides an excellent overview of the interaction undertaken between B cells and antigens, but delves too into isotype switching and terminal differentiation of B cells into plasma cells. Figure 12.3 is a user friendly guide to primary and secondary humoral immune responses.

Vaccination and vaccine types are covered in chapter 15; however, I would have liked to have seen more mention specifically of influenza virus.

The book concludes with a chapter entitled 'Veterinary clinical laboratory immunology', which provides the reader with a concise review of laboratory assays used in antibody detection but also expands on immunohistochemistry techniques.

Overall, I feel that this book is a welcome addition to any student library, but also as a 'go to book' for the new graduate clinician with its easy to read format and extensive index.

Melanie S. Lean

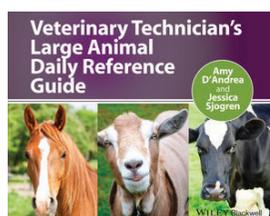
doi: 10.1136/vr.g5408

## Large animal reference guide

### Veterinary Technician's Large Animal Daily Reference Guide

Amy D'Andrea and Jessica Sjogren

464 pages,  
paperback,  
£41.99.  
Wiley-  
Blackwell.  
2013.  
ISBN 978 0 8138 1621 0



THIS is a comprehensive reference guide aimed at the more experienced reader. The authors have spent some 15 years compiling the data and presenting it in an easy-to-reference format. In over 400 pages, the authors cover a wide range of subjects from preventive health care, nutrition, reproduction and anatomy to emergency and critical care; there's even a small chapter on holistic medicine.

There is very little narrative text, with most of the data being presented in tabular form. The photographs are mostly in black and white and the diagrams are simple line drawings. The pharmacology chapter

is particularly informative with several examples of drug calculations being given; the classification system is helpful, allowing the reader to dip in and out with relative ease.

The chapter on nursing care was by far the most useful section in terms of presenting practical tips on blood sampling, wound management and fluid therapy, to give just a few examples. The section on pain management describes in detail how to recognise signs of pain in various species (for example, behavioural changes, altered feeding habits) and the importance of analgesic provision. The chapter on clinical pathology provides details of laboratory techniques and analyses, and includes a table of normal ranges for the main parameters, which are useful for those involved in disease diagnoses.

There is a great deal of information given from an equine management viewpoint, and the book would benefit from a more balanced view across large animal species. The book would also benefit from a section, or indeed chapter, on handling techniques and restraint in different species; both from a 'well animal' standpoint and the hospitalised patient.

The guide is presented in landscape format, which is not going to be to everyone's taste; the reader is obliged to use the book in a 'calendar' fashion, making it awkward to flick back and forth through pages while cross-referencing various tables.

Overall, the book sets out to provide current data on the daily responsibilities of the large animal veterinary technician in an accessible format. There is no reason why it should not also be a useful guide for newly qualified vets and veterinary nurses.

J. W. Thompson

doi: 10.1136/vr.5409

## Books received

### Trends in Game Meat Hygiene: From Forest to Fork

Edited by P. Paulsen, A. Bauer and F. J. M. Smulders  
400 pages, hardback, €85. Wageningen Academic Publishers. 2014.  
ISBN 978 90 8686 238 2

### Proceedings of the 6th International Conference on the Assessment of Animal Welfare at the Farm and Group Level

Edited by Luc Mounier and Isabelle Veissier  
270 pages, paperback, €37. Wageningen Academic Publishers. 2014.  
ISBN 978 90 8686 247 4