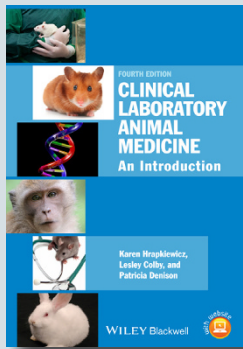


A new edition of a useful introduction

Reviewed by Joanne M. Smith, DVM, DACLAM



CLINICAL LABORATORY ANIMAL MEDICINE: AN INTRODUCTION, 4TH EDN.

By Karen Hrapkiewicz, Lesley Colby & Patricia Denison

Wiley-Blackwell, New York, NY

Price: \$56.42

Paperback, 424 pages

ISBN: 978-1-118-34510-8

This fourth edition textbook provides an excellent introduction to clinical laboratory animal medicine, with material updated since the third edition to include web materials, regulations, dosage charts, new information on transgenic mice and updated references. The book contains descriptions of specific genetic and clinical techniques, which are very basic and can provide a starting point and basic understanding for students or researchers. Those that plan to work extensively with laboratory animals can use the book's provided references to learn more about clinical skills and specific colony management. This book is not aimed specifically at 'pocket pet' clinicians, but they might also find useful information for small mammals here.

Each species featured in *Clinical Laboratory Animal Medicine* is given a chapter that follows the same format to describe its use in research, basic biological information, husbandry and techniques, therapeutic charts, diseases and references for additional reading. This organization makes it easy for readers to compare between species and might help students when studying for exams. The end of each chapter also includes review questions that are useful for self-evaluation.

The material in *Clinical Laboratory Animal Medicine* is similar to that of other texts such as *Harkness and Wagner's Biology and Medicine of Rabbits and Rodents* (Wiley-Blackwell, New York, NY, 2010), *Laboratory Animal Medicine* (Academic Press, Waltham, MA) from the American College of Laboratory Animal Medicine, and The American Association for Laboratory Animal Science (AALAS) training manuals—the *Assistant Laboratory Animal Technician Training Manual* (AALAS, Memphis, TN, 2009), the *Laboratory Animal Technician Training Manual* (AALAS, Memphis, TN, 2000) and the *Laboratory Animal Technologist Training Manual* (AALAS, Memphis, TN, 2007). It is a happy medium between books that are aimed at technicians and those that are aimed at veterinarians specializing in laboratory medicine.

Smith is a facility veterinarian with the Division of Veterinary Resources, Office of Research Services at the National Institutes of Health in Bethesda, MD.

Since the third edition, the introduction has been reorganized to better address the interests of its targeted readers. The second chapter of *Clinical Laboratory Animal Medicine* contains an updated review of regulations and guides that inform proper animal care and use, including the current *Guide for the Care and Use of Laboratory Animals*, while later chapters describe and prescribe practices that are in line with these up-to-date resources. This edition also references current legal and environmental enrichment guidelines and provides links to excellent web resources, including a companion website that features content updates and supplementary teaching materials. The book's layout includes side tabs on the outer margins of its pages to delineate chapters and allow the reader to quickly navigate between chapters, which is a nice organizational touch.

The chapters of *Clinical Laboratory Animal Medicine* are mostly organized by study species, and consequently some useful information is buried among discussions of species-specific concerns and diseases. For example, embryo rederivation with mice and rats is now considered the primary method for clearing new generations of infectious agents at many institutions, but a section on microbiologic classification describes only cesarean rederivation and cross-fostering techniques; embryo transfer is only mentioned later during discussion of viral diseases. In another example, a section on *Pseudomonas aeruginosa* in mice describes methods of controlling water quality, but these methods are not mentioned in the section on watering equipment in the chapter on 'Facility Design, Equipment, Housing, and Management'. There were also references to keeping dogs and cats in the same facility. While this might be done in private practice, the *Guide for the Care and Use of Laboratory Animals* recommends that species be housed in separate facilities unless common housing is specifically justified. Other regulations, although occasionally used, seem to be out of place with current practices at research facilities such as regulations that require staff not to own pets of the species with which they work.

Clinical Laboratory Animal Medicine currently features chapters on the primary rodent species, rabbits and non-human primates used in laboratory animal medicine today, but future editions could improve by discussing aquatic species such as zebrafish and *Xenopus*, as well as general information on husbandry and techniques with such aquatic species. Also, although they are discussed in many other medical texts, livestock and companion species might merit a section that discusses their use in research and techniques specific to clinical laboratory animal medicine. It might also be useful to mention certain avian species that are used in research, both small birds such as finches and larger poultry such as chickens and ducks. In its current form, however, *Clinical Laboratory Animal Medicine* is still an excellent text for veterinary courses on laboratory animal medicine, and it can be useful for veterinary professionals who desire to familiarize themselves with this field and the species therein.