

METADATA

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Abstract

The present book is addressed to students and/or graduates of biomedical sciences and aims to introduce them to the basic principles of Laboratory Animal Science, providing them with specialized knowledge for managing a laboratory animal colony, as well as with special knowledge on biology, housing and care, non-surgical experimental procedures (handling, administration of substances, blood sampling), anesthesia and euthanasia of those laboratory animal species most commonly used in biomedical experimental research. The book is divided into the General and the Species-specific Section. The General Section (chapters 1-13) contains information regarding the use of animals in biomedical research and ethics of their use, alternative methods, the relevant legislation, the basic principles of breeding and management of a laboratory animal colony, methods of substances' administration and sampling of biologic materials, anesthesia, assessment and management of pain and distress, euthanasia, health monitoring and zoonoses. The Species-specific Section (chapters 14-24) contains information regarding the biology, breeding, handling, blood sampling, substances' administration, anesthesia and euthanasia of the most commonly used laboratory animal species (mouse, rat, gerbil, hamster, guinea pig, rabbit, dog, cat, pig, non-human primates and fish).



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