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<b>Titolo</b>	Essentials of Laboratory Animal Science: Principles and Practices // edited by P. Nagarajan, Ramachandra Gudde, Ramesh Srinivasan
<b>Pubbl/distr/stampa</b>	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
<b>ISBN</b>	981-16-0987-X
<b>Edizione</b>	[1st ed. 2021.]
<b>Descrizione fisica</b>	1 online resource (797 pages)
<b>Collana</b>	Biomedical and Life Sciences Series
<b>Disciplina</b>	636.0885
<b>Soggetti</b>	Zoology Veterinary microbiology Animal welfare - Moral and ethical aspects Veterinary medicine Veterinary Microbiology Animal Ethics Veterinary Science
<b>Lingua di pubblicazione</b>	Inglese
<b>Formato</b>	Materiale a stampa
<b>Livello bibliografico</b>	Monografia
<b>Nota di contenuto</b>	Module 1_General Principles and regulations -- Module 2_Principles of Laboratory Animal Science -- Module 3_Laboratory Animal Techniques and practices -- Module 4_Specialty areas of Laboratory Animal Science.
<b>Sommario/riassunto</b>	This book comprehensively reviews the anatomy, physiology, genetics and pathology of laboratory animals as well as the principles and practices of using laboratory animals for biomedical research. It covers the design of buildings used for laboratory animals, quality control of laboratory animals, and toxicology, and discusses various animal models used for human diseases. It also highlights aspects, such as handling and restraint and administration of drugs, as well as breeding and feeding of laboratory animals, and provides guidelines for developing meaningful experiments using laboratory animals. Further, the book discusses various alternatives to animal experiments for drug and chemical testing, including their advantages over the current approaches. Lastly, it examines the potential effect of harmful pathogens on the physiology of laboratory animals and discusses the

state of art in *in vivo* imaging techniques. The book is a useful resource for research scientists, laboratory animal veterinarians, and students of laboratory animal medicine.

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