

Guide To The Care And Use Of Experimental Animals

International Animal Research Regulations National Research Council 2012-06-26 Animals are widely used in neuroscience research to explore biological mechanisms of nervous system function, to identify the genetic basis of disease states, and to provide models of human disorders and diseases for the development of new treatments. To ensure the humane care and use of animals, numerous laws, policies, and regulations are in place governing the use of animals in research, and certain animal regulations have implications specific to neuroscience research. To consider animal research regulations from a global perspective, the IOM Forum on Neuroscience and Nervous System Disorders, in collaboration with the National Research Council and the Institute for Laboratory Animal Research, held a workshop in Buckinghamshire, UK, July 26-27, 2011. The workshop brought together neuroscientists, legal scholars, administrators, and other key stakeholders to discuss current and emerging trends in animal regulations as they apply to the neurosciences. This document summarizes the workshop.

Guide to the Care and Use of Experimental Animals Ernest D. Olfert 1993

Guide to the Care and Use of Experimental Animals Canadian Council on Animal Care 1980

Guide to the Care and Use of Experimental Animals 1980

Guide for the Care and Use of Laboratory Animals Institute for Laboratory Animal Research 1996-08-06 A respected resource for decades, the Guide for the Care and Use of Laboratory Animals has been revised by a committee of experts, based on input from scientists and the public. The Guide incorporates recent research on commonly used species, including farm animals, and includes extensive references. It is organized around major components of animal use: Institutional policies and responsibilities. The committee discusses areas that require policy attention: the role and function of the Institutional Animal Care and Use Committee, protocols for animal care and use, occupational health and safety, personnel qualifications, and other areas. Animal environment, husbandry, and management. The committee offers guidelines on how to design and run a management program, addressing environment, nutrition, sanitation, behavioral and social issues, genetics, nomenclature, and more. Veterinary care. The committee discusses animal procurement and transportation, disease and preventive medicine, and surgery. The Guide addresses pain recognition and relief and issues surrounding euthanasia. Physical plant. The committee identifies design and construction issues, providing guidelines for animal-room doors, drainage, noise control, surgery, and other areas. The Guide for the Care and Use of Laboratory Animals provides a framework for the judgments required in the management of animal facilities--a resource of proven value, now updated and expanded. This revision will be important to researchers, animal care technicians, facilities managers, administrators at research institutions, policymakers involved in research issues, and animal welfare advocates.

Occupational Health and Safety in the Care and Use of Research Animals Committee on Occupational Safety and Health in Research Animal Facilities 1997-06-23 Much has been written about the care of research animals. Yet little guidance has appeared on protecting the health and safety of the people who care for or use these animals. This book, an implementation handbook and companion to Guide For the Care and Use of Laboratory Animals, identifies principles for building a program and discusses the accountability of institutional leaders, managers, and employees for a program's success. It provides a detailed description of risks-- physical and chemical hazards, allergens and zoonoses, and hazards from experiments--which will serve as a continuing reference for the laboratory. The book offers specific recommendations for controlling risk through administrative procedures, facility design, engineering controls, and periodic evaluations. The volume focuses on the worker, with detailed discussions of work practices, the use of personal protective gear, and the development of an emergency response plan. This handbook will be invaluable to administrators, researchers, and employees in any animal research facility. It will also be of interest to personnel in zoos, animal shelters, and veterinary facilities.

Education and Training in the Care and Use of Laboratory Animals
Management of Animal Care and Use Programs in Research, Education,

and Testing Robert H. Weichbrod 2017-09-07 AAP Prose Award Finalist 2018/19 Management of Animal Care and Use Programs in Research, Education, and Testing, Second Edition is the extensively expanded revision of the popular Management of Laboratory Animal Care and Use Programs book published earlier this century. Following in the footsteps of the first edition, this revision serves as a first line management resource, providing for strong advocacy for advancing quality animal welfare and science worldwide, and continues as a valuable seminal reference for those engaged in all types of programs involving animal care and use. The new edition has more than doubled the number of chapters in the original volume to present a more comprehensive overview of the current breadth and depth of the field with applicability to an international audience. Readers are provided with the latest information and resource and reference material from authors who are noted experts in their field. The book: - Emphasizes the importance of developing a collaborative culture of care within an animal care and use program and provides information about how behavioral management through animal training can play an integral role in a veterinary health program - Provides a new section on Environment and Housing, containing chapters that focus on management considerations of housing and enrichment delineated by species - Expands coverage of regulatory oversight and compliance, assessment, and assurance issues and processes, including a greater discussion of globalization and harmonizing cultural and regulatory issues - Includes more in-depth treatment throughout the book of critical topics in program management, physical plant, animal health, and husbandry. Biomedical research using animals requires administrators and managers who are knowledgeable and highly skilled. They must adapt to the complexity of rapidly-changing technologies, balance research goals with a thorough understanding of regulatory requirements and guidelines, and know how to work with a multi-generational, multi-cultural workforce. This book is the ideal resource for these professionals. It also serves as an indispensable resource text for certification exams and credentialing boards for a multitude of professional societies Co-publishers on the second edition are: ACLAM (American College of Laboratory Animal Medicine); ECLAM (European College of Laboratory Animal Medicine); IACLAM (International Colleges of Laboratory Animal Medicine); JCLAM (Japanese College of Laboratory Animal Medicine); KCLAM (Korean College of Laboratory Animal Medicine); CALAS (Canadian Association of Laboratory Animal Medicine); LAMA (Laboratory Animal Management Association); and IAT (Institute of Animal Technology).

Laboratory Animal Anaesthesia Paul Flecknell 2009-04-09 Laboratory Animal Anesthesia looks at recent significant developments in anesthetic practices in laboratory experiments involving animals. It also provides information about basic standards for proper use of anesthesia. In addition, it examines the equipment and different anesthetic agents that are used in performing an experiment on animals. The book also discusses the profound effects of anesthesia on the physiological aspect of the animals' body systems, such as hypothermia and respiratory depression. The book addresses the proper management and care that should be provided for the animals that undergo anesthesia. Furthermore, it covers different anesthetic procedures that should be used on various kinds of small animals intended for laboratory experiments. The main goal of this book is to provide information about the different anesthetic agents used in experiments, and the proper standards to follow when using anesthetics on lab animals. • New edition provides new information on anesthesia and analgesia, and has an extensively revised and updated bibliography • Provides a balanced consideration of the needs of scientific research and the welfare of laboratory animals • Written by a veterinary anesthetist and scientist with over 30 years' experience in the field, and who is actively engaged in research in this area • Provides rapid, easily accessed information using tabulated summaries • Provides those with limited experience of anesthesia with the information they need to carry our procedures effectively, safely, and humanely • Provides sufficient depth for the more experienced anesthetist moving to this field

The UFAW Handbook on the Care and Management of Laboratory and Other Research Animals Robert C. Hubrecht 2010-01-19 The seminal reference on the care of laboratory and captive animals, The UFAW Handbook on the Care and Management of Laboratory and Other Research Animals is a must-have for anyone working in this field. The

UFAW Handbook has been the definitive text since 1947. Written for an international audience, it contains contributions from experts from around the world. The book focuses on best practice principles throughout, providing comprehensive coverage, with all chapters being peer reviewed by anonymous referees. As well as addressing the husbandry of laboratory animals, the content is also of great value to zoos and aquaria. Changes for the eighth edition: Revised and updated to reflect developments since publication of the previous edition. New chapters on areas of growing concern, including: the 3Rs; phenotyping; statistics and experimental design; welfare assessment; legislation; training of people caring for lab animals; and euthanasia. All material combined into one volume for ease of reference. This book is published on behalf of UFAW (The Universities Federation for Animal Welfare), with whom we also publish the UFAW/Wiley-Blackwell Animal Welfare Book Series. This major series of books provides an authoritative source of information on worldwide developments, current thinking and best practice in the field of animal welfare science and technology. For details of all of the titles in the series see <http://www.wiley.com/go/ufaw> www.wiley.com/go/ufaw/a.

Use of Laboratory Animals in Biomedical and Behavioral Research

National Research Council 1988-02-01 Scientific experiments using animals have contributed significantly to the improvement of human health. Animal experiments were crucial to the conquest of polio, for example, and they will undoubtedly be one of the keystones in AIDS research. However, some persons believe that the cost to the animals is often high. Authored by a committee of experts from various fields, this book discusses the benefits that have resulted from animal research, the scope of animal research today, the concerns of advocates of animal welfare, and the prospects for finding alternatives to animal use. The authors conclude with specific recommendations for more consistent government action.

Definition of Pain and Distress and Reporting Requirements for Laboratory Animals

National Research Council 2001-01-26 In this first in a proposed series of workshops on regulatory issues in animal care and use, the Institute for Laboratory Animal Research (ILAR) has addressed the existing and proposed requirements for reporting pain and distress in laboratory animals. The Animal Welfare Act, administered by the Animal and Plant Health Inspection Service of the United States Department of Agriculture (USDA), mandates that pain and distress in laboratory animals be minimized. USDA is considering two policy changes with regard to this specific mandate. Firstly, since there has been no functional definition of "distress," USDA has prepared such a definition and requested feedback from the scientific community on its usefulness for regulatory and reporting requirements. The second issue concerns the pain and distress categorization scheme for reporting to USDA. Various groups and individuals have questioned the efficacy of the current categories, and specific changes have been proposed by the Humane Society of the United States. USDA is considering these and other potential changes to the existing scheme. Thus, given these potential changes to animal welfare policy, the aim of the ILAR/NIH joint workshop was to provide feedback to the USDA. The speakers were asked to address these two issues as well as to comment upon whether the information contained in the 1992 ILAR report *Recognition and Alleviation of Pain and Distress in Laboratory Animals* is still useful to investigators in assisting them to comply with regulations. The speakers provided perspectives based on their individual expertise in the areas of science of pain and distress, animal welfare policy, protocol review, and/or as representatives of relevant organizations or institutions. The following proceedings are an edited transcript of their presentations.

Laboratory Animal Management National Research Council 1994-02-01 This newly revised edition incorporates the regulatory requirements and improved practices for laboratory animal care that have developed over the past two decades. The volume covers: Selection of dogs as research models. Design, construction, and maintenance of facilities. Temperature, humidity, food, water, bedding, sanitation, animal identification, record keeping, and transportation. General veterinary care, as well as special care of breeding animals and random-source animals. *Laboratory Animal Management: Dogs* examines controversies over proper cage sizes and interpretation of federal requirements for exercise and offers recommendations for researchers. Guidelines are provided on how to recognize and alleviate pain and distress in research dogs and on the sensitive topic of euthanasia. *Laboratory Animal Management: Dogs* discusses how to assemble a proper research protocol and how to handle conflicts. Outlined are procedures for institutional animal care and use and committee review.

The volume also presents guidelines for handling aging dogs, use of radiation in experiments, and a wide range of other special circumstances. Thoroughly referenced, this guide will be indispensable to researchers, research administrators, review committees, and others concerned about laboratory dogs.

Fundamentals of Laboratory Animal Science Enqi Liu 2017-07-28

Laboratory animals are becoming increasingly important for biomedical research. It is said that approximately 70% of biomedical research is associated with the use of experimental animals. Laboratory animal research not only expands our knowledge of science, but also greatly improves human and animal health. The field of laboratory animal science is ever-growing and changing as new experimental techniques are developed and new animal models are created. It is essential to know not only the biological features of each laboratory animal but also how to use and care for them responsibly in order to perform high-quality experiments. Courses in beginning Laboratory Animal Science are starting to be offered in many universities throughout the world. However, a practical introductory textbook that contains state-of-the-art techniques is still lacking. *Fundamentals of Laboratory Animal Science* provides comprehensive information on the principles and practices of using laboratory animals for biomedical research. Each individual chapter focuses on a key sub-discipline of laboratory animal science: animal welfare and best humane care practices in the laboratory; the quality control of laboratory animals; the anatomy, physiology, and husbandry of commonly used species; the principles of creating and using animal models for studying human diseases; practical techniques used for laboratory animal experiments; experimental design; and animal experimentation management. Knowledge of this broad spectrum of concepts and skills will ensure research goes smoothly while greatly reducing animal pain and distress. Well-illustrated and thoroughly referenced, this book will serve not only as a standard textbook but also as a handy guide for veterinarians, researchers, animal care staff, administrators, and other professionals who are involved in laboratory animal science.

Recognition and Alleviation of Distress in Laboratory Animals National Research Council 2008-04-10 Scientific advances in our understanding of animal physiology and behavior often require theories to be revised and standards of practice to be updated to improve laboratory animal welfare. This new book from the Institute for Laboratory Animal Research (ILAR) at the National Research Council, *Recognition and Alleviation of Distress in Laboratory Animals*, focuses on the stress and distress which is experienced by animals when used in laboratory research. This book aims to educate laboratory animal veterinarians; students, researchers, and investigators; animal care staff, as well as animal welfare officers on the current scientific and ethical issues associated with stress and distress in laboratory animals. It evaluates pertinent scientific literature to generate practical and pragmatic guidelines. *Recognition and Alleviation of Distress in Laboratory Animals* focuses specifically on the scientific understanding of the causes and the functions of stress and distress, the transformation of stress to distress, and the identification of principles for the recognition and alleviation of distress. This book discusses the role of humane endpoints in situations of distress and principles for the minimization of distress in laboratory animals. It also identifies areas in which further scientific investigation is needed to improve laboratory animal welfare in order to adhere to scientific and ethical principles that promote humane care and practice. *Guide for the Care and Use of Laboratory Animals* Institute of Laboratory Animal Resources (U.S.). Committee on Revision of the Guide for Laboratory Animals Facilities and Care 1972

Clinical Laboratory Animal Medicine Karen Hrapkiewicz 2013-11-11 *Clinical Laboratory Animal Medicine: An Introduction, Fourth Edition* offers a user-friendly guide to the unique anatomy and physiology, care, common diseases, and treatment of small mammals and nonhuman primates. Carefully designed for ease of use, the book includes tip boxes, images, and review questions to aid in comprehension and learning. The Fourth Edition adds new information on transgenic mice, drug dosages, techniques, and environmental enrichment, making the book a comprehensive working manual for the care and maintenance of common laboratory animals. The book includes information on topics ranging from genetics and behavior to husbandry and techniques in mice, rats, gerbils, hamsters, guinea pigs, chinchillas, rabbits, ferrets, and nonhuman primates. A companion website provides editable review questions and answers, instructional PowerPoints, and additional images not found in the book. *Clinical Laboratory Animal Medicine* is an invaluable resource for practicing veterinarians, veterinary students,

veterinary technicians, and research scientists.

Science, Medicine, and Animals National Research Council 2004-11-21 Science, Medicine, and Animals explains the role that animals play in biomedical research and the ways in which scientists, governments, and citizens have tried to balance the experimental use of animals with a concern for all living creatures. An accompanying Teacher's Guide is available to help teachers of middle and high school students use Science, Medicine, and Animals in the classroom. As students examine the issues in Science, Medicine, and Animals, they will gain a greater understanding of the goals of biomedical research and the real-world practice of the scientific method in general. Science, Medicine, and Animals and the Teacher's Guide were written by the Institute for Laboratory Animal Research and published by the National Research Council of the National Academies. The report was reviewed by a committee made up of experts and scholars with diverse perspectives, including members of the U.S. Department of Agriculture, National Institutes of Health, the Humane Society of the United States, and the American Society for the Prevention of Cruelty to Animals. The Teacher's Guide was reviewed by members of the National Academies' Teacher Associates Network. Science, Medicine, and Animals is recommended by the National Science Teacher's Association.

Guide for the Care and Use of Laboratory Animals -- Korean Edition National Research Council 2005-08-27 A respected resource for decades, the Guide for the Care and Use of Laboratory Animals has been updated by a committee of experts, taking into consideration input from the scientific and laboratory animal communities and the public at large. The Guide incorporates new scientific information on common laboratory animals, including aquatic species, and includes extensive references. It is organized around major components of animal use: Key concepts of animal care and use. The Guide sets the framework for the humane care and use of laboratory animals. Animal care and use program. The Guide discusses the concept of a broad Program of Animal Care and Use, including roles and responsibilities of the Institutional Official, Attending Veterinarian and the Institutional Animal Care and Use Committee. Animal environment, husbandry, and management. A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment, husbandry, behavioral and population management, and more. Veterinary care. The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian. It includes recommendations on animal procurement and transportation, preventive medicine (including animal biosecurity), and clinical care and management. The Guide addresses distress and pain recognition and relief, and issues surrounding euthanasia. Physical plant. The Guide identifies design issues, providing construction guidelines for functional areas; considerations such as drainage, vibration and noise control, and environmental monitoring; and specialized facilities for animal housing and research needs. The Guide for the Care and Use of Laboratory Animals provides a framework for the judgments required in the management of animal facilities. This updated and expanded resource of proven value will be important to scientists and researchers, veterinarians, animal care personnel, facilities managers, institutional administrators, policy makers involved in research issues, and animal welfare advocates.

The Principles of Humane Experimental Technique William Moy Stratton Russell 1992

Education and Training in the Care and Use of Laboratory Animals National Research Council 1991-02-01 Federal law now requires that institutions provide training for anyone caring for or using laboratory animals. This volume provides the guidelines and resources needed to coordinate a quality training program, as well as to meet all legal requirements. A core module for all personnel takes no more than four hours to present. Most staff then proceed to one or more additional skills-development modules including the species-specific module that can be customized to any species in use at the institution, the pain management module, and the surgery module. The volume provides content information for required topics-from ethics to record keeping-and lists sources of additional publications, audiovisual programs, and computerized teaching aids. Included are: Ready-to-use teaching outlines, with detailed instructions for presenting material. Practical guidelines on logistics, covering scheduling, budgeting, and more. Guidelines on how to design training for adults and how to work with investigators who may resist taking training courses. This practical guidebook will be necessary for research institutions, particularly for staff members responsible for training coordination.

Essentials of Laboratory Animal Science: Principles and Practices

P. Nagarajan 2021-07-23 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.

The Laboratory Ferret C. Andrew Matchett 2012-03-09 Laboratory animals, including ferrets, play an important role in biomedical research and advances. The humane care and management of these animals remains an ongoing concern. Published in color to provide greater clarity to the techniques and concepts discussed, *The Laboratory Ferret* presents basic information and common procedures in detail to *Public Health Service Policy on Humane Care and Use of Laboratory Animals* National Institutes of Health (U.S.). Office for Protection from Research Risks 1986

The Laboratory Mouse Hans Hedrich 2012-06-14 *The Laboratory Mouse, Second Edition* is a comprehensive book written by international experts. With inclusions of the newly revised European standards on laboratory animals, this will be the most current, global authority on the care of mice in laboratory research. This well-illustrated edition offers new and updated chapters including immunology, viruses and parasites, behavior, enrichment and care standards of laboratory mice across the life sciences, medical and veterinary fields. Features four-color illustrations with complete instruction on mouse surgery, anatomy, behavior and care of the mouse in laboratory research Offers additional chapters on new mouse strains, phenotyping of strains, bacteria and parasites, and immunology Includes the newly revised EU standards on care, as well as, comparisons to standards and regulations in the US and other countries *Guide for the Care and Use of Laboratory Animals* 1985

The IACUC Handbook, Third Edition Jerald Silverman 2014-05-20 Ever since its establishment by USDA regulation in the mid-1980s, the Institutional Animal Care and Use Committee (IACUC) has evolved as the premier instrument of animal welfare oversight within research institutions in the United States. As biomedical research continuously grows, the role and impact of the IACUC has increased in scope and complexity. The IACUC Handbook has become "the Bible" for individuals when the time comes for them to serve on their institution's IACUC. It provides a foundation for understanding and implementing the many and varied responsibilities of this committee. This Third Edition comprehensively addresses the significant changes in the pertinent regulatory environment and interpretation of applicable federal laws, regulations, and policies. It provides multiple references and commentary on the new edition of the Guide for the Care and Use of Laboratory Animals, the new AVMA Guidelines for the Euthanasia of Animals: 2013 Edition, and the Office of Laboratory Animal Welfare's Frequently Asked Questions. The Third Edition also features an updated survey of IACUC practices from institutions around the United States, offering wisdom gained from their experience. In addition, it includes a chapter that provides an international perspective on how animal welfare reviews can function in other countries.

Guide for the Care and Use of Laboratory Animals Institute of Laboratory Animal Resources (U.S.). Committee on Care and Use of Laboratory Animals 1978

Guide for the care and use of laboratory animals National Research Council (U.S.). Institute of Laboratory Animal Resources (U.S.). Committee on Care and Use of Laboratory Animals 1985

Comfortable Quarters for Laboratory Animals Animal Welfare Institute 1956*

Laboratory Animal Welfare Kathryn Bayne 2013-09-02 Laboratory Animal Welfare provides a comprehensive, up-to-date look into the new science of animal welfare within laboratory research. Animals specifically considered include rodents, cats and dogs, nonhuman primates, agricultural animals, avian animals and aquatic animals. The book examines the impact of experiment design and environment on animal welfare, as well as emergency situations and euthanasia practices.

Readers will benefit from a review of regulations and policy guidelines concerning lab animal use, as well as information on assessing animal welfare. With discussions of the history and ethics of animals in research, and a debate on contemporary and international issues, this book is a go-to resource for laboratory animal welfare.

Guide for the Care and Use of Laboratory Animals 1985

Laboratory Animal and Exotic Pet Medicine - E-Book Margi Sirois

2015-07-24 Learn how to properly handle and care for lab animals and exotic species with *Laboratory Animal and Exotic Pet Medicine, Principles and Procedures*, 2nd Edition. This comprehensive resource provides the latest anatomy, physiology, and taxonomy information on a wide variety of species — including birds, reptiles and amphibians, rats and mice, guinea pigs, hamsters, rabbits, gerbils, ferrets, wildlife, woodchucks, armadillos, frogs, and fish. Coverage also includes a number of commonly performed procedures (such as blood collection, medicine administration, and animal husbandry) and in-depth information on housing, restraint, nutrition, common diseases, diagnostics, and therapeutics. Research-related information, including legal and ethical issues surrounding exotic animals being kept as pets, as well as the humane use of animals in research, make this text a must-have resource for any aspiring vet tech or professional who must work with lab animals. Comprehensive coverage addresses a wide variety of species (rats, mice, guinea pigs, hamsters, gerbils, ferrets, rabbits, nonhuman primates, swine, chinchillas, armadillos, amphibians, reptiles, birds, fish, farm animals, and cats and dogs) and covers a wide variety of topics (such as animal species, the laboratory setting, regulatory guidelines, and ethical considerations) to fully prepare students for work with all types of animals. Consistent organization of each species chapter makes it easy for students to quickly identify similarities and differences among various laboratory animals. The latest information on laws and ethics related to lab animal medicine cover the areas of pain management, use, care, and more. Review questions at the end of each chapter allow students to assess their knowledge of the material. Discussion of specific uses for each species in biomedical research gives students a perspective on animal use that allows them to explain the benefits of animal use as required by veterinary technology program accreditation procedure. Boxes and tables list anatomic and physiologic data for each species. NEW! Updated design features more high-quality, full-color illustrations and a revised reader-friendly layout with learning objectives and key points to make content easier to follow.

Guide to the care and use of experimental animals. 1 Canadian Council on Animal Care 1984

Guide for the Care and Use of Laboratory Animals -- Japanese

Edition National Research Council 1997-01-31 A respected resource for decades, the *Guide for the Care and Use of Laboratory Animals* has been updated by a committee of experts, taking into consideration input from the scientific and laboratory animal communities and the public at large. The Guide incorporates new scientific information on common laboratory animals, including aquatic species, and includes extensive references. It is organized around major components of animal use: Key concepts of animal care and use. The Guide sets the framework for the humane care and use of laboratory animals. Animal care and use program. The Guide discusses the concept of a broad Program of Animal Care and Use, including roles and responsibilities of the Institutional Official, Attending Veterinarian and the Institutional Animal Care and Use Committee. Animal environment, husbandry, and management. A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment, husbandry, behavioral and population management, and more. Veterinary care. The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian. It includes recommendations on animal procurement and transportation, preventive medicine (including animal biosecurity), and clinical care and management. The Guide addresses distress and pain recognition and relief, and issues surrounding euthanasia. Physical plant. The Guide identifies design issues, providing construction guidelines for functional areas; considerations such as drainage, vibration and noise control, and environmental monitoring; and specialized facilities for animal housing and research needs. The *Guide for the Care and Use of Laboratory Animals* provides a framework for the judgments required in the management of animal facilities. This updated and expanded resource of proven value will be important to scientists and researchers, veterinarians, animal care personnel, facilities managers, institutional administrators, policy makers involved in research issues, and animal welfare advocates.

Animal-centric Care and Management Dorte Bratbo Sørensen 2020-10-14

The concept of the 3Rs (Refinement, Reduction and Replacement) has been used as a framework for improving the welfare of laboratory animals for the last half century. By establishing an animal-centric view on housing and management, *Animal-centric Care and Management: Enhancing Refinement in Biomedical Research* takes Russell and Burch's definition of Refinement as "elimination of inhumanities" and goes further. Rather than fitting animals into experimental conditions, it encourages readers to adjust conditions to better meet the behavioral, emotional, physical, and physiological needs and preferences of the animals. The team of expert authors, from the fields of laboratory animal science, ethology, biology as well as animal training, provide ideas for creating housing conditions and handling procedures that induce, to the best of current abilities and knowledge, a long-term positive state of mind in the animals under our care. This book is written for animal caretakers, animal health technicians, researchers, animal facility managers, laboratory animal veterinarians, and anyone who engages in work with living experimental animals or is interested in the continuous improvement of laboratory animal welfare. This interdisciplinary guide will act as a catalyst, resulting in multiple viewpoints and fields collaborating to optimize laboratory animal welfare.

Guide for the Care and Use of Laboratory Animals 1986

Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research National Research Council 2003-08-22

Expanding on the National Research Council's *Guide for the Care and Use of Laboratory Animals*, this book deals specifically with mammals in neuroscience and behavioral research laboratories. It offers flexible guidelines for the care of these animals, and guidance on adapting these guidelines to various situations without hindering the research process. *Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research* offers a more in-depth treatment of concerns specific to these disciplines than any previous guide on animal care and use. It treats on such important subjects as: The important role that the researcher and veterinarian play in developing animal protocols. Methods for assessing and ensuring an animal's well-being. General animal-care elements as they apply to neuroscience and behavioral research, and common animal welfare challenges this research can pose. The use of professional judgment and careful interpretation of regulations and guidelines to develop performance standards ensuring animal well-being and high-quality research. *Guidelines for the Care and Use of Mammals in Neuroscience and Behavioral Research* treats the development and evaluation of animal-use protocols as a decision-making process, not just a decision. To this end, it presents the most current, in-depth information about the best practices for animal care and use, as they pertain to the intricacies of neuroscience and behavioral research.

Guide for the Care and Use of Laboratory Animals National Research Council 2011-01-27 A respected resource for decades, the *Guide for the Care and Use of Laboratory Animals* has been updated by a committee of experts, taking into consideration input from the scientific and laboratory animal communities and the public at large. The Guide incorporates new scientific information on common laboratory animals, including aquatic species, and includes extensive references. It is organized around major components of animal use: Key concepts of animal care and use. The Guide sets the framework for the humane care and use of laboratory animals. Animal care and use program. The Guide discusses the concept of a broad Program of Animal Care and Use, including roles and responsibilities of the Institutional Official, Attending Veterinarian and the Institutional Animal Care and Use Committee. Animal environment, husbandry, and management. A chapter on this topic is now divided into sections on terrestrial and aquatic animals and provides recommendations for housing and environment, husbandry, behavioral and population management, and more. Veterinary care. The Guide discusses veterinary care and the responsibilities of the Attending Veterinarian. It includes recommendations on animal procurement and transportation, preventive medicine (including animal biosecurity), and clinical care and management. The Guide addresses distress and pain recognition and relief, and issues surrounding euthanasia. Physical plant. The Guide identifies design issues, providing construction guidelines for functional areas; considerations such as drainage, vibration and noise control, and environmental monitoring; and specialized facilities for animal housing and research needs. The *Guide for the Care and Use of Laboratory Animals* provides a framework for the judgments required in the management of animal facilities. This updated and expanded resource of proven value will be important to scientists and researchers, veterinarians, animal care personnel, facilities managers, institutional administrators, policy makers involved in research issues, and animal

welfare advocates.

Laboratory Animals Javier Guillen 2017-11-03 *Laboratory Animals: Regulations and Recommendations for the Care and Use of Animals in Research*, Second Edition, is the only publication to offer a global compilation of standards on the care, welfare and use of animals in research. The book provides updated information that will be of great interest to professionals across laboratory animal science and biomedical research. Users will find a broad picture of the regulations required in other areas of the world that will be essential to appropriately manage animal care and use programs. Offers a worldwide view and global compilation of regulations, guidelines and recommendations for laboratory animal research Provides insight into factors that play key roles in the regulatory framework for countries and geographic regions Compares and contrasts regulations in different regions Written in layman's terms to easily understand legislation and regulations

Guide To The Care And Use Of Experimental Animals

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