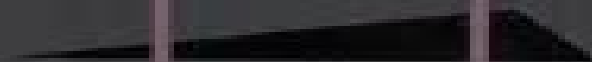


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# STRATEGIES THAT INFLUENCE COST CONTAINMENT IN ANIMAL RESEARCH FACILITIES



# Strategies That Influence Cost Containment In Animal Research Facilities

**Lynn C. Anderson, Glen Otto, Kathleen  
R. Pritchett-Corning, Mark T. Whary**



## **Strategies That Influence Cost Containment In Animal Research Facilities:**

**Strategies That Influence Cost Containment in Animal Research Facilities** National Research Council, Institute for Laboratory Animal Research, Committee on Cost of and Payment for Animal Research, 2001-01-18 Care and use of animals in research are expensive prompting efforts to contain or reduce costs Components of those costs are personnel regulatory compliance veterinary medical care and laboratory animal management equipment and procedures Many efforts have been made to control and reduce personnel costs the largest contributing factor to cost through better facility and equipment design more efficient use of personnel and automation of many routine operations However there has been no comprehensive recent analysis of the various cost components or examination of the strategies that have been proven or are purported to decrease the cost of animal facility operation Strategies that Influence Cost Containment in Animal Research Facilities examines the current interpretation of governmental policy Office of Management and Budget Circular A 21 concerning institutional reimbursement for overhead costs of an animal research facility and describes methods for economically operating an animal research facility This report develops recommendations by which federal auditors and research institutions can establish what cost components of research animal facilities should be charged to institutions indirect cost pool and what animal research facility cost components should be included in the per diem charges to investigators and assesses the financial and scientific ramifications that these criteria would have among federally funded institutions Further the report determines the cost components of laboratory animal care and use in biomedical research and assesses and recommends methods of cost containment for institutions maintaining animals for biomedical research

**Management of Animal Care and Use Programs in Research, Education, and Testing** Robert H. Weichbrod, Gail A. (Heidbrink) Thompson, John N. Norton, 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

**Handbook of Laboratory Animal Science** Jann Hau, Steven J. Schapiro, 2021-05-17 Building upon the success of previous editions of the bestselling Handbook of Laboratory Animal Science first published in 1994 this latest revision combines all three volumes in one definitive guide It covers the essential principles and practices of Laboratory Animal Science as well as selected animal models in scientific disciplines where much progress has been made in recent years Each individual chapter focuses on an important subdiscipline of laboratory animal science and the chapters can be read and used as stand alone texts with only limited necessity to consult other chapters for information With new contributors at the forefront of their fields the book reflects the scientific and technological advances of the past decade It also responds to advances in our understanding of animal behavior emphasizing the importance of implementing the three Rs replacing live animals with alternative methods reducing the number of animals used and refining techniques to minimize animal discomfort This fourth edition will be useful all over the world as a textbook for laboratory animal science courses for postgraduate and undergraduate students and as a handbook for scientists who work with animals in their research for university veterinarians and for other specialists in laboratory animal science Animal Models for Assessing

Countermeasures to Bioterrorism Agents National Research Council, Division on Earth and Life Studies, Institute for Laboratory Animal Research, Committee on Animal Models for Assessing Countermeasures to Bioterrorism

Agents, 2012-01-09 The Transformational Medical Technologies TMT has been a unique component of the U S Department of Defense DoD medical biodefense efforts since 2006 Its mission is to advance countermeasure research and development in support of the broader goal of the DoD to protect warfighters from emerging infectious diseases and future genetically engineered biological weapons The TMT using advanced science and technology approaches focused on the development of roadspectrum countermeasures that target common host and pathogen pathways or enhance the host s immune response

Many of these pathogens are lethal or cause such debilitating diseases in humans that it is ethically inappropriate to test the efficacy of these countermeasures in human volunteers. In lieu of human participants, these products may be tested in animals and approved for human use under the provisions of the Food and Drug Administration's 2002 Animal Rule. The reliance on animal models for the development and licensure of medical countermeasures against biothreats is challenging for a number of reasons. The ad hoc Committee on Animal Models for Assessing Countermeasures to Bioterrorism Agents prepared a consensus report that would address the challenges stemming from developing and testing medical countermeasures against biothreat agents in animal models. *Animal Models for Assessing Countermeasures to Bioterrorism Agents* evaluates how well the existing TMT employed or candidate animal models reflect the pathophysiology, clinical picture, and treatment of human disease as related to the agents of interest. The report addresses the process and feasibility of developing new animal models for critical biodefense research, placing emphasis on the need for a robust and expeditious validation process in terms of the FDA's Animal Rule. The report also evaluates alternatives to the use of animal models based on the premise of the Three Rs. *Recognition and Alleviation of Pain in Laboratory Animals* National Research Council, Division on Earth and Life Studies, Institute for Laboratory Animal Research, Committee on Recognition and Alleviation of Pain in Laboratory Animals, 2010-01-14. The use of animals in research adheres to scientific and ethical principles that promote humane care and practice. 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. *Recognition and Alleviation of Pain in Laboratory Animals* is the second of two reports revising the 1992 publication *Recognition and Alleviation of Pain and Distress in Laboratory Animals* from the Institute for Laboratory Animal Research. ILAR focuses on pain experienced by animals used in research. This book aims to educate laboratory animal veterinarians, students, researchers, and investigators. Institutional Animal Care and Use Committee members and animal care staff and animal welfare officers on the current scientific and ethical issues associated with pain in laboratory animals. It evaluates pertinent scientific literature to generate practical and pragmatic guidelines for recognizing and alleviating pain in laboratory animals, focusing specifically on the following areas: physiology of pain in commonly used laboratory species; pharmacologic and non-pharmacologic principles to control pain; identification of humane endpoints and principles for minimizing pain associated with experimental procedures. Finally, the report identifies areas in which further scientific investigation is needed to improve laboratory animal welfare.

**Recognition and Alleviation of Distress in Laboratory Animals** National Research Council, Division on Earth and Life Studies, Institute for Laboratory Animal Research, Committee on Recognition and Alleviation of Distress in Laboratory Animals, 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** National Research Council, Division on Earth and Life Studies, Institute for Laboratory Animal Research, Committee for the Update of the Guide for the Care and Use of Laboratory Animals, 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

**Scientific and Humane Issues in the Use of Random Source Dogs and Cats in Research** National Research Council, Division on Earth and Life Studies, Institute for Laboratory Animal Research, Committee on Scientific and Humane

Issues in the Use of Random Source Dogs and Cats in Research,2009-12-30 Scientific and Humane Issues in the Use of Random Source Dogs and Cats in Research examines the value of random source animals in biomedical research and the role of Class B dealers who acquire and resell live dogs and cats to research institutions Findings include that while some random source dogs and cats may be necessary and desirable for National Institutes of Health NIH funded research there is no clear need to obtain those animals from Class B dealers Several options for random source animal acquisition already exist and additional options are recommended which would further ensure the welfare of these animals and foster a positive public image for NIH While the scientific community has recognized and responded to concerns for humane treatment of animals in research government oversight has thus far been unable to fully enforce the Animal Welfare Act in regard to Class B dealers of live animals Although the animals acquired by Class B dealers are destined for research and NIH research in particular the standard of care while in the possession of some Class B dealers requires an inordinate amount of government enforcement and is not commensurate with the policies of most NIH funded research laboratories This dichotomy of standards reflects poorly on public perceptions of NIH and jeopardizes animal welfare This book will be crucial for NIH and other groups using random source animals in research including veterinary schools and research facilities Animal welfare advocates policy makers and concerned pet owners will also find this a vital and informative work for reconciling the needs of research with the welfare of animals

**The IACUC Handbook** Jerald Silverman,Mark A. Suckow,Sreekant Murthy,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

**The Laboratory Rat** Patrick Sharp,Jason S. Villano,2012-12-11 Rats have long been recognized as a valuable biomedical research model notably in the investigation of aging toxicology addiction and common human diseases such as diabetes and hypertension In many instances individuals conducting such research studies are charged with important responsibilities including animal facility management animal h

**Strengthening the Disaster Resilience of the Academic Biomedical**

**Research Community** National Academies of Sciences, Engineering, and Medicine, Division on Earth and Life Studies, Health and Medicine Division, Institute for Laboratory Animal Research, Board on Earth Sciences and Resources, Board on Health Sciences Policy, Committee on Strengthening the Disaster Resilience of Academic Research Communities, 2017-10-20 The academic biomedical research community is a hub of employment economic productivity and scientific progress Academic research institutions are drivers of economic development in their local and state economies and by extension the national economy Beyond the economic input that the academic biomedical research community both receives and provides it generates knowledge that in turn affects society in myriad ways The United States has experienced and continues to face the threat of disasters and like all entities the academic biomedical research community can be affected Recent disasters from hurricanes to cyber attacks and their consequences have shown that the investments of the federal government and of the many other entities that sponsor academic research are not uniformly secure First and foremost events that damage biomedical laboratories and the institutions that house them can have impacts on the safety and well being of humans and research animals Furthermore disasters can affect career trajectories scientific progress and financial stability at the individual and institutional levels Strengthening the Disaster Resilience of the Academic Biomedical Research Community offers recommendations and guidance to enhance the disaster resilience of the academic biomedical research community with a special focus on the potential actions researchers academic research institutions and research sponsors can take to mitigate the impact of future disasters

Laboratory Animal Medicine Lynn C. Anderson, Glen Otto, Kathleen R. Pritchett-Corning, Mark T. Whary, 2015-07-04 Laboratory Animal Medicine Third Edition is a fully revised publication from the American College of Laboratory Medicine's acclaimed blue book series It presents an up to date volume that offers the most thorough coverage of the biology health and care of laboratory animals The book is organized by species with new inclusions of chinchillas birds and program and employee management and is written and edited by known experts in the fields Users will find gold standard guidance on the study of laboratory animal science as well as valuable information that applies across all of the biological and biomedical sciences that work with animals Organized by species for in depth understanding of biology health and best care of animals Features the inclusion of chinchillas quail and zebra finches as animal models Offers guidance on program and employee management Covers regulations policies and laws for laboratory animal management worldwide

Occupational stress and joy of animal care professionals in zoos, sanctuaries, farms, shelters and laboratory animal facilities Sally Thompson Iritani, Sabrina Brando, Lynette Arnason Hart, 2023-06-02

**Guía para el cuidado y uso de animales de laboratorio** National Research Council, 2011 Esta Guía de la Academia Nacional de Ciencias de Estados Unidos constituye el principal estándar internacional para el cuidado y uso de animales en condiciones adecuadas desde el punto de vista humanitario científico y técnico Esta primera traducción al español de la Guía para el cuidado y uso de animales de laboratorio en su octava edición se constituye en un hito para el universo hispano parlante que



se relaciona con la investigación de laboratorio Fue revisada y enriquecida con el aporte de veterinarios investigadores y expertos de Argentina Colombia Chile España Estados Unidos México Perú y Uruguay *Animal Models for the Study of Human Disease* P. Michael Conn, 2017-06-20 *Animal Models for the Study of Human Disease* Second Edition provides needed information on model sharing animal alternatives animal ethics and access to databanks of models bringing together common descriptions of models for busy researchers across biomedical and biological sciences Offering easily searchable advantages and disadvantages for each animal model and organized by disease topics this resource aids researchers in finding the best animal model for research in human disease Organized by disease orientation for ease of searchability Provides information on locating resources animal alternatives and animal ethics Covers a broad range of animal models used in research for human disease Contributed by leading experts across the globe Expanded coverage of diabetes and neurological diseases

**The British National Bibliography** Arthur James Wells, 2002 **Comparative Medicine** , 2002 **Research Awards Index** , 1979 Planning and Designing Research Animal Facilities Jack Hessler, Noel Lehner, 2011-04-28 Research institutions have or are planning to build expand and renovate animal research facilities to keep up with the demands of biomedical research caused in part by growth in the use of genetically altered rodents and the upsurge of research in infectious diseases Properly designed facilities greatly facilitate effective management and high quality day to day animal care that is required to optimally support animal research and testing There are multiple solutions to address the myriad of factors that influence the design and construction of animal research facilities There is no best design applicable for all facilities and arguably not even a single best design for a given facility For this reason Planning and Designing Research Animal Facilities is not intended to be a how to book The goal is to cover the basic programmatic requirements of animal research facilities provide ideas for meeting those requirements while hopefully stimulating the creative process in which designers in consultation with those who work in animal research facilities generate even better ideas That is how progress has been made and will continue to be made Facilitates communication between the parties involved in planning and designing animal facilities by providing contemporary information and stimulating creativity that will help lead to wise decisions and advance the knowledge base for planning design and constructing animal research facilities Bulletin of the Atomic Scientists , 1970-06 The Bulletin of the Atomic Scientists is the premier public resource on scientific and technological developments that impact global security Founded by Manhattan Project Scientists the Bulletin's iconic Doomsday Clock stimulates solutions for a safer world

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