

Update of the Guide for the Care and Use of Laboratory Animals

Committee

Janet C. Garber

Chair

Dr. Janet Garber, Garber Consulting, LLC, received her Doctor of Veterinary Medicine degree from Iowa State University and her Ph.D. in patho-physiology from the University of Wisconsin. Her experiences have included infectious disease research at the US Army Medical Research Institute of Infectious Diseases (USAMRIID), primate medicine and research, GLP device and materials evaluation, and transplantation immunology. Her current interests are in the areas of laboratory animal facility management, infectious diseases, occupational health and safety and research program management. She most recently was Vice President, Safety Assessment, at Baxter Healthcare Corporation and is now a consultant with Garber Consulting, LLC in North Carolina. Dr. Garber is currently a member of the Council on Accreditation, AAALAC, International, and previously served as Chair of the Council. She served on the ILAR committee to revise the Guide for the Care and Use of Laboratory Animals and the committee on Occupational Health and Safety in the Care and Use of Research Animals.

Robert W. Barbee

Member

Dr. Wayne Barbee is Associate Professor and Associate Director of Research at the Department of Emergency Medicine, School of Medicine, Virginia Commonwealth University. Dr. Barbee holds a doctorate in Physiology and has nearly three decades of research involving a wide variety of animals (bats, cats, crabs, dogs, mice, pigs, minipigs and rats) in a number of experimental settings. His research has focused on hemorrhagic shock and resuscitation in dogs and rodents, acute and chronic rodent surgery, and analysis of rodent hemodynamics. He has been associated with IACUCs at both small and medium size-institutions for nearly two decades, and is familiar with the oversight of animal care and use programs. He has served on multiple study sections for both the NIH and DOD. Dr. Barbee also served as an Oxford, UK 2006 fellow (recipient, VCU Harris-Manchester Award) where he examined policies, training, and security issues related to animal care and use within the UK.

Joseph T. Bielitzki

Member

Dr. Joe Bielitzki, Research Manager, Office of Research and Commercialization, University of Central Florida, has worked with non human primates in the laboratory environment for 20 years. Over this period he has worked with macaques (pig-tail, long tail, Japanese, rhesus, stump-tail), baboons (yellow, green and hybrids) squirrel monkeys, capuchin monkeys, mangabeys, gibbons, chimpanzees, orangutan, bonobos and gorillas. In the area of non human primates his area of expertise is in enteric diseases, nursery rearing, and colony management. He has also worked with mice and rats in a variety of international facilities. He was instrumental in the writing and acceptance of the NASA Bioethical Principles for the Use of Animals in Research (NPD 8910.1). He speaks frequently on IACUC function and the importance of ethics in the use of animals. His background includes experience in academia, industry and government in the role of attending veterinarian, program manager, and researcher.

Leigh A. Clayton

Member

Dr. Leigh Clayton has worked in the zoo/aquarium field or the exotic pet medicine field exclusively since 2000. As she has worked with animals held in aquatics systems both in re-circulating fresh and salt water, she is experienced in managing disease and accomplishing preventive health programs for fishes, amphibians, and reptiles as well as birds and mammals. She is Diplomate of the American Board of Veterinary Practitioners (Avian). Dr. Clayton has routinely used her knowledge of nitrogen cycling and the basics of a variety of life support system designs to solve health issues in these captive settings and help ensure adequate animal health. Dr. Clayton is currently Director of Animal Health at the National Aquarium in Baltimore where she also chairs the Animal Welfare Committee. She has served on the Executive Board of the Association of Reptilian and Amphibian Veterinarians, a role that allowed her to routinely liaise with leading researchers in the amphibian medicine field.

John C. Donovan

Member

Dr. John Donovan, President of BioResources, Inc., has more than 30 years experience working as a veterinarian in biomedical research and is board certified by the American College of Laboratory Animal Medicine (ACLAM). After seven years in the US Army's Medical Research and Development Command, he spent 10 years at the National Institutes of Health, becoming the Director of the National Cancer Institute's Office of Laboratory Animal Science. He began his career in the pharmaceutical industry in 1994 as Senior Director of Worldwide Laboratory Animal Resources for Rhone Poulenc-Rorer Pharmaceuticals, leading to his position as Vice President of Laboratory Animal Science and Welfare for Aventis Pharmaceuticals in 1999. In 2001 he moved to Wyeth Pharmaceuticals where he was Vice President of BioResources until his retirement in 2007. During his career, Dr. Donovan served in numerous professional leadership positions including President of ACLAM and President of the Board of Directors of the Pennsylvania Society for Biomedical Research (PSBR). He also served on several boards including those of the National Association for Biomedical Research, ACLAM, PSBR and the New Jersey Association for Biomedical Research.

Dennis F. Kohn

Member

Dr. Dennis Kohn, Professor Emeritus of Clinical Comparative Pathology at Columbia University, has had 2 major areas of clinical and research interests during his career. He has had clinical and surgical responsibilities for a wide range of animal species, leading to publications dealing with anesthesia and analgesia of laboratory animals. His research interests have dealt primarily with the pathogenicity of *Mycoplasma pulmonis* in the respiratory tract of laboratory rats, and the experimental pathology induced within the central nervous system and joints of rats inoculated with *M. pulmonis*. Dr. Kohn has directed large laboratory animal resource programs in various academic institutions and trained veterinarians in this specialty. He was a member of the 1986 AVMA Panel on Euthanasia and previously served on the 1996 committee that revised the Guide.

Neil S. Lipman

Member

Dr. Neil Lipman is Diplomate of the American College of Laboratory Animal Medicine, Director of the Research Animal Resources Centers serving the Memorial Sloan-Kettering Cancer Center and the Weill Medical College of Cornell University and is Professor of Veterinary Medicine in Pathology and Laboratory Medicine at the Weill Cornell Medical College. He has considerable experience with most warm-blooded vertebrate species used in research (including several non human primate species), as well as with poikilotherms including Rana and Xenopus spp. and zebra fish. Dr. Lipman has considerable expertise with vivarium design, engineering, and operations, having designed over 1.5 M gross square feet of vivarium space and overseen the operation of a number of major academic animal resource programs. His research interests are principally translational and include development and analysis of new technologies especially with respect to rodent housing systems and monoclonal antibody production, the characterization of various animal models, understanding the etiopathogenesis of endocrinologic disorders affecting laboratory animal species, and development and analysis of novel therapeutic strategies.

Paul A. Locke

Member

Paul Locke, MPH, JD, DrPH, an environmental health scientist and attorney, is an Associate Professor at the Johns Hopkins University Bloomberg School of Public Health in the Department of Environmental Health Sciences, Division of Toxicology. He holds an MPH from Yale University School of Medicine, a DrPH from the Johns Hopkins University Bloomberg School of Public Health and a JD degree from Vanderbilt University School of Law. Prior to joining the Department of Environmental Health, he was the Deputy Director of the Pew Environmental Health Commission and the Director of the Center for Public Health and Law at the Environmental Law Institute. Dr. Locke's research and practice focus on how decision makers use environmental health science and toxicology in regulation and policy-making and how environmental health sciences influence the policy-making process. His areas of study include alternatives to animal testing in biomedical research, with particular emphasis on toxicity testing. He also maintains an active research program in radiation studies and radiation protection policy. Dr. Locke directs the Doctor of Public Health degree program in the Department of Environmental Health Sciences, and is co-director of the Johns Hopkins certificate program in Humane Science and Toxicology. From 2004 until 2009 he was a member of the National Academy of Sciences Nuclear and Radiation Studies Board, and has served on five National Academy of Sciences/National Research Council expert committees. He is admitted to practice law before the bars of the states of New York and New Jersey, the District of Columbia, the United States Court of Appeals for the Second Circuit and the United States Supreme Court.

John Melcher

Member

The Honorable John Melcher, a graduate of the College of Veterinary Medicine of the Iowa State University, was a practicing veterinarian in the state of Montana until 1969, in which year he was elected to the U.S. House of Representatives. He served as a Congressman for 8 years and as a Senator for 11 years. In both the House and the Senate, Senator Melcher was noted for his interest in agriculture, protection of public lands, notably Forest Service and Bureau of Land Management lands, and animal welfare and animal health protections. In 1984 he contributed to the Animal Welfare Act with an amendment requiring consideration of the psychological well being of primates used in medical research. After retiring from Congress, Senator Melcher established a second career as a consultant for the American Veterinary Medical Association and the American Association of Veterinary Medical Colleges. Senator Melcher represents the public.

Fred W. Quimby

Member

Dr. Fred Quimby is a Board-certified Laboratory Animal Veterinarian, with a doctorate in pathology, specialized in the assessment of immune function in animals. Prior to his retirement in 2007 he was Associate Vice President at Rockefeller University, while over the past 35 years he oversaw the research animal programs at three Universities (Tufts, Cornell and Rockefeller) and held the position of Professor at Cornell's Colleges of Medicine and Veterinary Medicine. He conducted research and lectured in the fields of immunology, pathology and environmental toxicology where he focused his research on Toxic Shock Syndrome, environmental intoxication with polychlorinated biphenyls (PCBs), and immune dysfunction in pet dogs. As a laboratory animal professional he has designed and overseen the construction of 5 animal facilities for research animals and a zoological park. Dr Quimby has had broad experience with a wide assortment of laboratory animals including rodents, dogs, primates, livestock, poultry, and fish, and published on the diseases, care and /or housing of each of them. He has served on various NAS/NRC Committees including the Guide Committee, the Committee on Immunologically Compromised Rodents (Chair), the Transgenic Animal Committee, the Committee to Develop Standards for Dogs (Chair), the Monoclonal Antibody Production Committee, and the Committee Evaluating Increasing Veterinary Involvement in Biomedical Research. He served as a member of the ILAR Council and chaired the Editorial Committee of the ILAR News. He is currently serving as a member of the Committee to Assess the Current and Future Workforce Needs in Veterinary Medicine. He was a charter member of the Society for Veterinary Ethics, a member of the Board of Directors for the National Association for Biomedical Research and a member of the Strategic Planning Committee for AAALAC International.

Patricia V. Turner

Member

Dr. Patricia Turner is a tenured Associate Professor and Program Leader of Graduate Studies in Laboratory Animal Medicine at the University of Guelph, Canada. She is a Diplomate of the American College of Laboratory Animal Medicine with specific expertise in comparative pathology. Dr. Turner has experience managing Canadian Council of Animal Care-compliant animal facilities that house a full range of species (fish, rodents and rabbits, dogs and cats, swine and sheep, nonhuman primates) in both academic and industry (GLP) settings. Dr. Turner serves as an AAALAC, International ad hoc evaluator with excellent knowledge of current U.S. guidelines and regulations concerning research animal care and use. Her research interests include innate immunity of mice, anesthesia and analgesia, and effects of environment on behavior.

Geoffrey A. Wood

Member

Dr. Geoffrey Wood is Associate Professor of Pathology at the Ontario Veterinary College, University of Guelph. Dr. Wood holds a doctorate in Medical Biophysics and a Doctor of Veterinary Science in Pathobiology. His research focuses on mouse models of human disease, specifically the use of genetically engineered and/or carcinogen treated mice that model human cancer. Dr. Wood's involvement with clinical cancer cases in dogs and cats from the Ontario Veterinary College teaching hospital enables the use of these systems to examine the impact of specific genes in cancer development and progression, and to conduct three species comparative oncogenomics to search for common mutations across species on a genome-wide scale. Dr. Wood has been involved in design or pathologic characterization of hundreds of genetically engineered mice including knockouts, knockdowns, tissue-specific knockouts, chimeras, transgenics, transgenics with regulatable expression (tet-on, tet-off, tamoxifen regulated), and combinations of these (e.g. quadruple gene knockouts, tissue specific knockdowns crossed to transgenic tumor models, etc). Further, Dr. Wood has expertise in using mice harboring human xenografts, randomly mutated mice, and surgical and chemical models of disease such as wound healing and induced systemic and local immunological responses.

Hanno Würbel

Member

Dr. Hanno Würbel is Professor of Animal Welfare and Ethology at the Justus-Liebig-University in Giessen, Germany. He has studied biology (zoology) at the University of Berne and graduated from the ETH Zürich with a doctoral thesis on the development and function of stereotypic behavior in laboratory mice. As a research fellow of the Swiss National Science Foundation, he pursued further studies on stereotypies in mice at the Bristol University School of Veterinary Science before returning to the ETH Zürich as lecturer in Applied Ethology. At the Neuroscience Centre Zürich Dr. Würbel further developed a broader research area focused on the developmental plasticity of brain and behavior in relation to questions of animal husbandry and animal welfare. In 2005 Dr. Würbel was awarded the Hessian Animal Welfare Research Prize. He is a member of the Animal Welfare Council of the German government.