

Preface to the Third Edition

Since the publication of the first (2000) and second (2006) editions of this book there have been a number of revisions to those federal laws, regulations, and policies that affect IACUCs. In some cases, these changes have simply reflected common, best practices of IACUCs, while others have directed IACUCs to implement new practices. Of note, the 8th edition of the *Guide for the Care and Use of Laboratory Animals*, published in 2011, added significant context for IACUC policies and practices. Examples of new expectations for IACUCs outlined in the 8th edition of the *Guide* include: application of experimental and humane endpoints; establishing mechanisms for communication of unexpected outcomes to the IACUC; enhanced review of studies involving physical restraint, multiple survival surgery, and food and fluid regulation, and the use of non-pharmaceutical grade compounds in animals; and post-approval monitoring.

The 8th edition of the *Guide* offers substantial definition with respect to animal care program management responsibility. In this regard, a collaborative relationship between the IACUC, the attending veterinarian, and the institutional official is expected, with the institutional official bearing ultimate responsibility for the program. As a result, the role of many IACUCs may evolve from being the presumed agent with sole responsibility, to that of a key team member with shared responsibility. Consequently, the IACUC retains an essential and central role that is supported by the attending veterinarian and institutional official.

Earlier editions of *The IACUC Handbook* exclusively focused on the IACUC within the context of the United States. While still U.S.-centric, this edition includes a chapter that offers the reader an international perspective on how an IACUC or other style of review can function beyond the borders of the United States. Though many general principles of animal care and use are the same, operational aspects may vary between countries or regions; thus, it is hoped that this approach will provide a basis for consideration of interpretation of relevant issues in a way that can be applied broadly.

In 2013 the American Veterinary Medical Association published updated guidelines for the euthanasia of animals. Those guidelines have been incorporated into this edition as needed. As with many guidelines, those related to euthanasia have evolved in response to new scientific information and the cumulative professional experience of those in the field.

This third edition of *The IACUC Handbook* builds upon the foundation laid in the first two editions and provides not only new information on existing laws, regulations, policies and "how to" advice, but also features an updated survey of IACUC practices from institutions around the nation. In this way, readers benefit from the combined experience of numerous IACUCs and some sense of 'best practices' can be ascertained. In some chapters we have permitted the repetition of items that are similar to those found in other chapters. These have been cross-referenced to provide a broader perspective of expert opinions. We hope all of this will be of value to you.

To ensure that the contributions of our authors are precise, outside review was conducted beyond the editorial review we provided. In this regard we thank Carol Clarke of USDA/APHIS/AC and Patricia Brown, Susan Silk, and Lori Hampton of NIH/OLAW who provided reviews of all chapters for concordance with their respective regulations and policies. APHIS/AC policies, which are in the online *Animal Care Resource Guide*, are interpretive rules that for practical purposes have the legal standing of the regulations

they help clarify. NIH/OLAW offers guidance on the interpretation of the PHS Policy and the recommendations of the *Guide* by providing online responses to Frequently Asked Questions. In some cases NIH/OLAW will not approve an animal welfare Assurance until the Assurance is consistent with the information in the Frequently Asked Questions.

Though intended to be a central part of the animal care responsibility triad, along with the attending veterinarian and the Institutional Official, the IACUC remains a key operational element. The IACUC has a unique place in the oversight of animal care and use activities for most organizations in the U.S. It is a self-regulatory committee, representing its institution to the federal government. Equally importantly, it helps represent to the public the basic standards of animal care and concerns for animal welfare to which researchers, institutions, and laboratory animal science professionals subscribe. Yet, if self-regulation is to be continued, then we must go the extra mile and strive to reach even higher standards of animal care and use. For that to occur, institutions and their IACUCs must be leaders, not followers.

Jerald Silverman, DVM
Mark A. Suckow, DVM
Sreekant Murthy, PhD