THE AMERICAN ASSOCIATION FOR LABORATORY ANIMAL SCIENCE (AALAS) IS A nonprofit association that serves as a forum for the exchange of information and expertise in the care and use of laboratory animals. Since 1950, AALAS has been dedicated to the humane care and treatment of laboratory animals and has supported the advancement of science benefiting people and animals. AALAS members are people and organizations concerned with the humane care and use of animals in research.

First published in 1984, the *Laboratory Animal Technician Training Manual* is the second in the series of AALAS technician training manuals. The primary purpose of the series is to assist laboratory animal technical personnel in gaining the knowledge that will allow them to attain a high degree of professionalism in their field and to prepare for the AALAS technician certification examinations.

The material covered in this manual reflects the knowledge level and skills that are expected of laboratory animal technicians, based on the 2005 AALAS Job Analysis Survey, and must be mastered prior to taking the Laboratory Animal Technician (LAT) certification examination. The first chapters build the framework for animal research through the oversight of research studies, the organization of an animal facility, and the management of the animal environment. A new emphasis is aquatic animal health and environmental management. The chapters on basic sciences aim to impart an understanding of anatomy, physiology, genetics, and breeding, and to provide the tools to perform common calculations in animal research. The chapters on research and surgical techniques focus on the frequent duties of a laboratory animal technician – technical procedures, research methodologies, surgical support, administering and monitoring anesthesia, and animal care and monitoring during studies. Because many laboratory animal technicians also have responsibilities in animal health monitoring, disease processes are described through the classification and course of disease, the immune system response to disease, and the clinical signs of disease. The manual concludes with the types of emergencies likely to occur in an animal facility, considered from the perspective of responding effectively to these situations.

Each chapter of the manual includes References and Additional Reading sections with supplemental material, such as books or journal articles, that provide more in-depth information about the topics covered in the chapter.

LAT certification candidates should study this manual and the LAT Reference List, building upon prior knowledge acquired from the *Assistant Laboratory Animal Technician Training Manual* and the ALAT Reference List. Please refer to the Technician Certification page on the AALAS website (http://www.aalas.org/certification/tech_cert.aspx) for the list of resources to study for the LAT exam. Because these items are subject to change, it is important to view the current list when beginning to prepare for an AALAS technician certification exam.

Any suggestions or comments about this manual should be addressed to education@aalas.org.
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