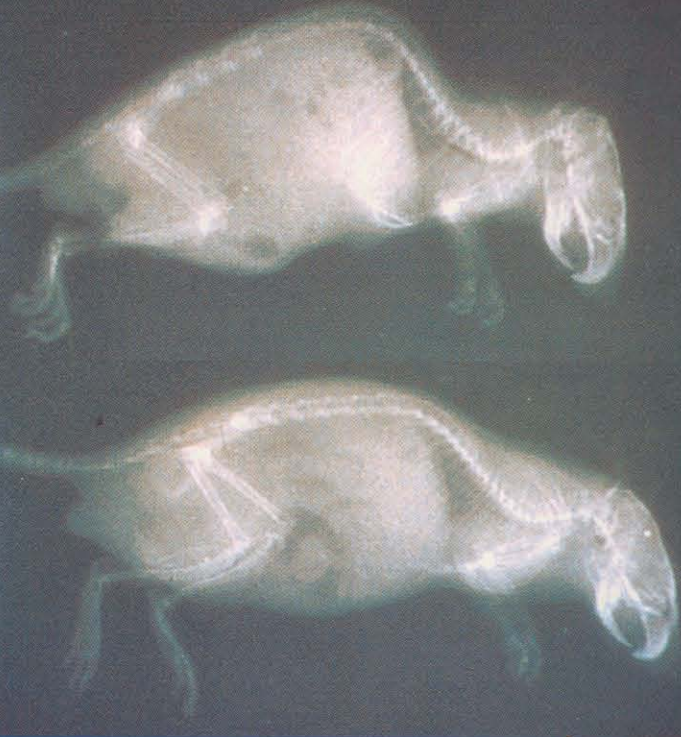


**American College  
of Laboratory  
Animal  
Medicine**



## Your Partners in Biomedical Science

### Benefits for the Principal Investigator

The provision of veterinary medical care prevents and alleviates the distress of disease in animals, and ensures delivery of support and care for animals on study. Proper veterinary care also reduces animal disease-related variables that adversely affect biomedical research and testing. As veterinarians who specialize in the use of animals in biomedical research, diplomates in the American College of Laboratory Animal Medicine (ACLAM) are valued consultants to other scientists in a myriad of topics related to comparative medicine and the care and use of laboratory animals.

These medical professionals provide advice on the selection of animal models, animal sources, species, strains, and quality of animals. They can readily answer questions about animal anatomy, physiology, and the influence of disease on research.

Because of their expertise and post-doctorate training, they are particularly adept at assisting researchers in the performance and evaluation of experimental techniques with animals, including the use of appropriate anesthetics, analgesics, tranquilizing drugs, and humane methods of euthanasia to meet study requirements. They further support investigators by providing guidance or services on surgical procedures and peri-operative care.

The knowledge and skills of ACLAM diplomates are valuable resources in the design of research projects, grant development, and preparation of animal use protocols.

### Partners in Research

ACLAM diplomates frequently engage in research and other scholarly activity, offering significant contributions to both the research mission and animal care program of an institution. As an investigator, the diplomate may conduct independent research in his or her area of expertise, and/or bring specific animal-related skills and knowledge to the research team.

Diplomates are often involved in studies dedicated to improving the health and well-being of experimental animals. Such research may be focused on: 1) discovering the

## Diplomates of the American College of Laboratory Animal Medicine Use of Animals in Research

cause, effects, and control of laboratory animal disease; 2) the search for better methods to control pain and distress in animals; 3) determining the optimum environments for animal housing; 4) the development of methods to improve animal husbandry; 5) improving techniques for the psychological well-being of laboratory animals; 6) study of the effects of environmental variables on research outcomes; or 7) probing the action, effect and efficacy of novel drug compounds on animal physiology. Furthermore, diplomates contribute to the development of specific animal models for human disease, or definition of better research techniques for use in animals.

All such research is essential to the advancement of quality scientific discovery, and is a logical extension of the ACLAM diplomate's contribution as an expert in comparative and laboratory animal medicine.

### Supporting the Biomedical Research Institution. Animal Resource Management

The background, training, and special knowledge of ACLAM diplomates makes them well suited to serve as directors of institutional animal resource programs. In this role, they determine and implement policies to ensure superior physical and social environments, nutrition, housing, microbiological controls, sanitary standards, breeding programs, genetic monitoring, and the overall care necessary to provide scientists with quality and healthy laboratory animals. As directors of animal facilities, they are responsible for decisions regarding fiscal appropriations and personnel management, frequently providing critical guidance on the optimum use of institutional resources. As acknowledged veterinary specialists, these highly trained and experienced professionals are an invaluable resource in determining best facility design. They are particularly adept at programmatic oversight of experimental applications of biological, chemical, and radiological hazards, and are instrumental in the development of occupational safety and health programs for personnel involved in the care and use of laboratory animals.



# American College of Laboratory Animal Medicine: Specialists on the Frontiers of Biomedical Research.



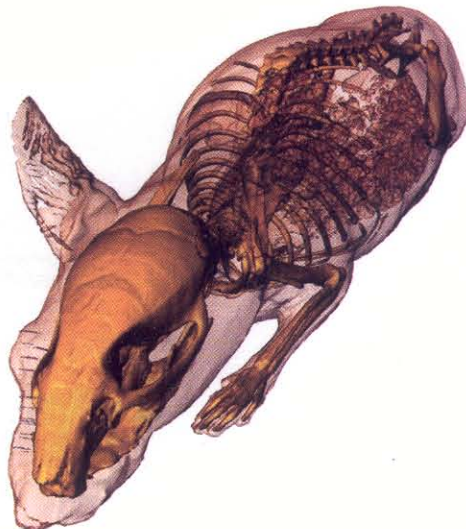
## Regulatory Compliance

One primary responsibility of an ACLAM diplomate is the provision of adequate veterinary care, as directed by Federal animal welfare regulations and policies.

The American College of Laboratory Animal Medicine has defined such care to include: a) disease detection and surveillance, prevention, diagnosis, treatment and resolution; b) guidance to animal users and monitoring animal use to assure that appropriate methods of handling and restraint are being used, and to ensure proper use of anesthetics, analgesics, tranquilizers, and methods of euthanasia; c) guidance, review, and approval of all pre-operative, surgical, and postoperative procedures; d) the promotion and monitoring of animal well-being including physical and psychological aspects of an animal's condition; and e) involvement in the review of animal use protocols. The ACLAM standard on adequate veterinary care is referenced by the Office of Laboratory Animal Welfare, National Institutes of Health, as one example of relevant veterinary issues which should be addressed in a comprehensive animal research program.

Though ACLAM diplomates can provide the institution with the requisite expertise to meet Federal laboratory animal care and use policies and regulations, it remains an institutional responsibility to achieve compliance. Thus, these laboratory animal specialists provide the necessary knowledge and background experience so important for the efficient operation of a compliant animal care and use program.

The diplomate's expertise in the areas of adequate veterinary care, use of anesthetics and analgesics, surgery and peri-operative care, the overall adequacy of animal care and use, and the promotion of animal well-being is vital to the success of an institutional research program. Additionally, the laboratory animal veterinarian often serves as a required member of the Federally mandated Institutional Animal Care and Use



## Teaching and Training

As laboratory animal experts, ACLAM diplomates often teach and train others. This may range from formal classroom instruction to informal training in a laboratory or animal facility setting. As the types of teaching can embrace a wide spectrum, so too can the categories of students instructed. Diplomats may train fellow scientists, research technicians acquiring the techniques for animal experimentation, or IACUC members familiarizing themselves with the regulations and requirements of an animal care and use program. Other individuals requiring training would include clinical veterinarians, medical technologists, animal care technicians, veterinary students, post-doctorate fellows, or undergraduate students specifically interested in the study of laboratory animal medicine, science, or management.

## Public Relations

ACLAM diplomates frequently share the opportunity to inform the general populace about the use of animals in research: the lay public, congressional representatives, elected officials, the media, other adult professionals, and particularly young people. All need to be educated on the laws and regulations which protect research animals, the excellent care given to laboratory animals, and the great contribution animal research has and continues to have on the life, health, and well-being of both humans and animals. Because of their expanded veterinary roles and specialty expertise, ACLAM diplomates have secured credibility with the public, and are therefore important members of the institution's public information team.



## DIPLOMATES OF THE AMERICAN COLLEGE OF LABORATORY MEDICINE

### Trained Specialists

### Multidisciplinary Leader

ACLAM diplomates are certified specialists in the field of laboratory animal medicine, an established specialty within the veterinary medical profession.

The American College of Laboratory Animal Medicine is officially recognized by the American Veterinary Medical Association as the certifying organization for comparative medicine professionals.

The College was founded in 1957 to encourage education, training, and research in laboratory animal medicine; to establish standards of training and experience for veterinarians professionally involved with the care and health of laboratory animals; and to recognize qualified persons in laboratory animal medicine by certification examination and other means.

Currently, ACLAM has certified over 625 veterinarians as active specialists in the field of laboratory animal medicine.

### ACLAM Certification

To become certified, laboratory animal medicine veterinarians must meet rigorous post-doctoral training, experience, publication, and examination requirements. Many veterinarians participate in formally recognized training programs offered by a number of academic and research institutions. These programs provide intense instruction and experience in laboratory animal medicine and research and are generally 3 to 5 years in duration. Many programs include earning an academic degree such as an M.S. or Ph.D. A veterinarian may qualify for the certifying examination by either completing a recognized training program with experience totaling four years, or by acquiring a minimum of six years of relevant experience. In addition, all candidates must have published a research paper relevant to laboratory animal medicine in a referred scientific journal.

Once they have met the training, experience, and publication requirements, the candidates are eligible to take the certifying examinations, a comprehensive exercise which encompasses the major functional areas of laboratory animal biology; laboratory animal resources management; clinical laboratory animal medicine and pathology; and animal experimentation.



ACLAM diplomates are involved in a wide variety of activities, including management and direction of animal resource facilities and programs; clinical medicine, surgery, and programs of disease prevention; consultation on the care and use of laboratory animals; assisting institutions in achieving compliance with animal care and use regulations; collaborative and independent research; and instruction and training. The roles of the ACLAM diplomate will depend on the interests and abilities of that person and the requirements the institute.

Institutions with limited research programs may require only a single specialist or a part-time consultant to meet their needs. The larger institution often finds that several individuals with varied interests and abilities are needed in order to adequately support all the required functions of an animal care and use program. Many such institutions employ a team of ACLAM

diplomates and other scientists to achieve full-service animal resource units or comparative medicine departments, which can then meet all the missions of research, testing and teaching. The true value of ACLAM diplomates is measured by their ability to successfully apply a wealth of knowledge and skills from a wide variety of experience and training to specific problems in biomedical research, while simultaneously promoting the welfare of both animals and people.

### For more information contact

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