

UNIVERSITY OF ILLINOIS at CHICAGO POSTDOCTORAL TRAINING PROGRAM in LABORATORY ANIMAL MEDICINE

HOW TO APPLY FOR THE PROGRAM

Interested candidates must apply through the Veterinary Internship and Residency Matching Program (www.virmp.org).

Applicants must meet the following requirements by the start of the training program:

- 1) Graduate of a veterinary college accredited by the AVMA.
- 2) DVM or equivalent degree.
- 3) Licensed to practice veterinary medicine in the United States.
- 4) Citizen or legal resident of the United States.

Application materials should be submitted to Dr. Lisa Halliday at lhall@uic.edu.

INTRODUCTION

The University of Illinois at Chicago (UIC) has been accredited by the Association for the Assessment and Accreditation of Laboratory Animal Care International (AAALAC) since 1970. The postdoctoral training program in laboratory animal medicine has been recognized by the American College of Laboratory Animal Medicine since 1994. The veterinary staff has 60 years combined experience in training veterinarians to effectively support biomedical research. The success of the training program may be measured by the examination pass rate of trainees and immediate post-training employment in the field of laboratory animal medicine. Given its extensive and successful history, UIC is well-suited to train veterinarians to meet the need for laboratory animal veterinarians to support research activities and perform collaborative research. The Biologic Resources Laboratory (BRL) is the institution's centralized core animal facility and the campus unit that oversees the procurement, care, and maintenance of animals used in the research, teaching, and testing programs conducted at UIC. The staff of the BRL oversees the institution's animal care and use program and ensures that the program meets federal regulations, the requirements of AAALAC International, and currently accepted standards for providing veterinary care and animal husbandry. The professional staff of the BRL provides advice to the research and teaching staff, conducts graduate and technical courses, directs the postdoctoral training program, and supports the IACUC through protocol review and policy and guideline development.

The UIC postdoctoral fellowship in laboratory animal medicine is funded through a partnership with a local pharmaceutical company. The level of financial support allows the program to accept one veterinarian per year with a total of three fellows in the program at any given time.

TRAINING PROGRAM

Objectives of the training program:

The didactic component of the training is designed to provide a firm foundation in the areas of laboratory animal medicine, science, and pathology in order to prepare trainees to effectively practice laboratory animal medicine and obtain ACLAM board certification. The experiential component is gained in program management, experimental surgery, anesthesiology, clinical medicine, clinical pathology, toxicology, and facility maintenance and design by completion of rotations within the animal care facilities on campus. The research component of the program is designed to train veterinarians in the development of animal models, study design and research methods in order to prepare trainees to become an integral component of the research team. The pharmaceutical rotation introduces postdoctoral trainees to a typical industry environment and animal care program.

The UIC postdoctoral training program in laboratory animal medicine has been in existence for over twenty years and has been recognized by the American College of Laboratory Animal Medicine (ACLAM) since 1994. The objective of the program is to provide an exceptional level of training so graduates are well-prepared to function as laboratory animal veterinarians, having gained experience with a variety of animal species, clinical and surgical techniques, and experimental models.

Key components of the training program:

The training program consists of three years of didactic and experiential training divided into blocks or rotations as outlined below. This track includes nine months of research training under the guidance of an ACLAM-boarded veterinarian or externally funded faculty member. The pharmaceutical component comprises the last nine months of the program and takes place at a pharmaceutical company located in the Chicago area.

1. Small Animal Medicine/ Laboratory Support Service: 100% - 6 month time commitment (year 1)
2. Primate Medicine: 100% - 6 month time commitment (year 1)
3. Large Animal Medicine and Surgery/Radiology: 100% - 6 month time commitment (year 2)
4. Research Training: 100% - 6 month time commitment (year 2)
5. Facility/Program Management: 100% - 3 month time commitment (year 3)
6. Pharmaceutical experience: 100% - 9 month time commitment (year 3)

COURSEWORK

There are four required graduate college classes that total 210 hours of instruction time. Two elective courses add an additional 119 hours of instruction time.

Required courses:

GC 401 (Scientific Integrity and Responsible Research) is specifically designed to meet NIH requirements for formal training in the responsible conduct of research. The course includes ethical and legal issues in the conduct of research and outlines the University of Illinois research standards, regulations, and procedures. Additionally, the State of Illinois requires that ethics training must be completed. The course consists of 14 hours instruction time.

GC 470 (Essentials for Animal Research) is designed to introduce the student to those elements which are essential requirements for using animals in research, teaching, or testing programs. The goals of this course are to provide the student with a basic understanding of the regulatory process, key factors that affect data obtained from laboratory animals, basic biology and handling techniques, basic principles of controlling pain and distress, preventing intra-operative infection, and assuring a humane death, and the social and ethical issues surrounding the use of animals in biomedical research. The course consists of 14 hours instruction time.

GC 471 (Experimental Animal Techniques) is a laboratory course that teaches noninvasive and invasive techniques commonly used in laboratory animals. Emphasis is placed upon proper handling and restraint, injection techniques, and the appropriate use of anesthetic, analgesics, and aseptic techniques. The course consists of 42 hours instruction time.

GC 473 (Seminar in Comparative Medicine) is a four semester series of lectures that focus on the biology, management, and diseases of species commonly used in biomedical research. Lectures are grouped by semester into related topics consisting of rodents and rabbits, nonhuman primates, miscellaneous species, and regulations. ACLAM diplomates, veterinary pathologists, laboratory animal medicine trainees, and guest speakers teach the lectures in this series. The course consists of 30 hours instruction time per semester.

Elective courses:

BSTT 400 (Biostatistics I) introduces students to descriptive statistics, basic probability concepts, one- and two-sample statistical inference, analysis of variance, and simple linear regression. Introduction to a statistical computer package such as Minitab or SAS is also covered. The course consists of 49 hours instruction time.

GCLS 504 (Research Methods I) is organized into ten modules focusing on the theory and practice of the major research techniques in biochemistry, molecular biology, spectroscopy, structural biology, genetics, bio-imaging, immunology, separation, kinetics, synthesis, and sequencing of biopolymers, bio-informatics, combinatorial chemistry, and high through-put screening technology. Trainees select up to three modules for theoretical and hands-on technical training. The course consists of 70 hours instruction time. This course is required for trainees participating in the NIH funded track of the program.

