

ASLAP VETERINARY STUDENT SUMMER FELLOWSHIP

University of Illinois at Chicago

How to Apply for the Fellowship

Students must submit a curriculum vitae, cover letter, current grade report (it does not need to be an official transcript), and names and contact information for three references to apply for the summer externship program. Letters of recommendation are not necessary. Only students matriculated in an AVMA-accredited veterinary school are eligible to participate.

The summer fellowship provides an hourly wage at the student rate for 40 hours per week for 12 weeks. All applicants must be able to commit to the 12-week duration of the program to be considered. There is housing available for a fee in graduate housing on the UIC campus, about 2 blocks from the animal facility. Information on campus housing and parking is available at <http://www.housing.uic.edu/halls/ssr/> and <http://www.uic.edu/depts/avcad/parking/>.

If selected for the fellowship, students are required to participate in the institution's occupational health program for individuals exposed to laboratory animals. At the initiation of employment, students will have an appointment at University Health Services to undergo a health history questionnaire and submit blood for tuberculosis testing and measles titer screening.

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

Introduction

The University of Illinois at Chicago (UIC) is a large urban multi-disciplinary educational and research institution within the city of Chicago. The animal research component consists of a centralized animal facility with several satellite facilities contained within a compact two square mile area. The institution has hosted summer veterinary students for over 20 years. This program has been funded both internally and externally via grants from the American Association of Laboratory Animal Science (AALAS) and the American Society of Laboratory Animal Practitioners (ASLAP) Foundation.

The students receive intensive training in laboratory animal medicine, including both didactic and applied components. For the didactic portion, they are given reading assignments and participate in the weekly resident seminar series and board exam review sessions. For the applied portion, they are given frequent opportunities to practice their skills on a variety of animal species under the guidance of the veterinary staff

The director and four clinical veterinarians all hold current licenses to practice veterinary medicine in the United States. In addition, all are board-certified by ACLAM and active members of the organization. The veterinary staff is active in organized veterinary and laboratory animal medicine, being general members and/or committee members of ASLAP, the American Veterinary Medical Association (AVMA), AALAS, the Chicago Branch of AALAS, and the Association of Primate Veterinarians.

Description of the Summer Fellowship Program

The summer externship program is divided into three four-week rotations, small animal/diagnostic laboratory, large animal/experimental surgery/radiology, and the nonhuman primate colony. Students work closely with various mentors during these rotations. The

program encompasses aspects of laboratory animal husbandry as well as veterinary medicine. This experience allows the students to gain perspective on the daily husbandry activities, which impact the management of a particular species. Students are trained to perform various skills associated with the successful practice of laboratory animal medicine as follows:

- Observe and perform daily husbandry activities
 - Small animal – change rodent cages, daily room check
 - Large animal – feed animals, clean dog and pig enclosures
 - Nonhuman primates – feed animals, clean baboon and macaque rooms
- Observe and perform technical procedures
 - Blood collection
 - Intravenous and intra-arterial catheter placement
 - Fecal collection
 - Urine collection, including catheterization and cystocentesis
 - Gastric gavage
 - Endotracheal intubation
 - Identification (tattoo, microchip, ear tag, ear punch)
 - Nail trims and ear cleaning
 - Radiographs (thoracic for recently acquired nonhuman primates)
 - Tuberculin skin testing (nonhuman primates)
- Assist in preventive medicine programs
 - Annual or semiannual physical exams
 - Interpretation of diagnostic tests (CBC, serum chemistry analysis, and fecal examination)
 - Immunization as needed
- Assist with management of clinical cases
 - Initial assessment
 - Develop plan for diagnosis and treatment
 - Monitoring until case resolution
- Surgical training
 - Observe and assist with surgical cases
 - Master suturing, including interrupted, continuous, and subcuticular closures
 - Postoperative monitoring
- Dental training
 - Examination of dentition, gingiva, and oral cavity
 - Routine dental prophylaxis
 - Advanced dental techniques (canine disarming, tooth extraction, root canal)
- Gain understanding of psychological well-being and environmental enrichment
 - Observe normal behavior
 - Identification of abnormal behavior, including stereotypies
 - Cage, food, and social enrichment strategies
- Mouse breeding colony management
 - Identification of vaginal plugs
 - Breeding schemes
 - Cross-fostering as a method of rederivation
- Understand species-specific zoonotic diseases
 - For nonhuman primates, focus on herpes B virus, tuberculosis, retroviruses, and bacterial and protozoal intestinal pathogens

There are three components to the didactic portion of the program. First, students are assigned weekly chapters from the ACLAM *Laboratory Animal Medicine* series or *Pathology of Laboratory*

Rodents and Rabbits that pertains to their current rotation. Students are given written or oral quizzes by the veterinarian to ensure comprehension of the material. If a postdoctoral fellow is rotating through the service area, the summer students may also be assigned the same reading assignments as the fellow for discussion as a group. The small animal and nonhuman primate veterinarians supplement the reading assignments by reviewing glass slides or images of classic diseases and pathology of relevant species. Selected articles from *Comparative Medicine* or the *Journal of the American Association for Laboratory Animal Science* may be assigned in order to introduce the students to the primary journals in the field.

Second, students also participate in the summer term of GC 473 (Seminar in Comparative Medicine). They are expected to attend the weekly sessions as well as present a lecture on a topic assigned by the senior veterinary staff. Since the summer term focuses on clinical management, the knowledge they gain researching and preparing the lecture directly adds to their core knowledge of veterinary medicine. Students are also expected to complete a small clinically-based research project under the direction of the veterinary staff. Students present the results during the Seminar series; this presentation may take the place of a clinical topic.

Third, students participate in the weekly review of ACLAM board examination material organized by the postdoctoral fellows in the training program. They are encouraged to read the assigned materials and prepare discussion questions in order to familiarize themselves with the core material that must be mastered to achieve ACLAM certification.