ISRAEL COLLEGE FOR LABORATORY ANIMAL MEDICINE: TRAINING REQUIREMENTS FOR VETERINARY SPECIALIZATION IN ISRAEL

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INTRODUCTION
The purpose of the training program guidelines is to define the training requirement for specialization in Laboratory Animal Medicine, according to the Israeli Veterinary Regulation (Board Certification and Examination – 2007) i.e. "complete at least 4 years of training and experience in Laboratory Animal Medicine, subsequent to graduation from veterinary school that is acceptable to the Council". Section 12 of the appendix to the Israeli Veterinary Regulations requires "3 years of clinical work with laboratory animals, 3 months in a diagnostic laboratory, and 3 months of clinical work with birds, companion animals, cattle or sheep, and 6 months of basic sciences”.

The document has been based on and adapted from the curriculum described in the Federation of European Laboratory Animal Science Associations (FELASA) Guidelines for the Education for Specialists in Laboratory Animal Science (Reference 1).

This document has been approved by the Central Committee for Veterinary Specialization in Israel (CCVSI) on the 10th October 2007.

Definitions
Training program: A training program recognized by the Central Committee for Veterinary Specialization in Israel (CCVSI) on behalf of the Ministry of Agriculture of at least four years duration.
Resident: The graduate veterinarian undergoing a CCVSI recognized training program of at least four years duration.
Program Director: A specialist veterinarian in the field of Laboratory Animal Medicine, recognized by the CCVSI, who is responsible for the supervision of residents.
Resident Advisor: The program director may enlist the help of other individual(s) (the 'Resident Advisor(s)') at the parent or other institutions. The qualifications of Resident Advisor(s) will vary with the subject area to be covered.

Requirements for a training program
The CCVSI has established a process to recognize formal training programs in laboratory animal medicine. Recognition as a formal Training Program means that individuals successfully completing the program can satisfy the "training and experience" requirements to sit for the CCVSI certifying examination.

In order for a training program to be accepted it must abide by the standards as set forth in Appendix 4 (Program Minimal Standards). The program is reviewed by a subcommittee of the CCVSI, the Laboratory Animal Medicine Board Certification (LAMBC) committee which subsequently recommends program to the CCVSI council for official recognition.

CCVSI Training Program Minimal Standards
1. The sponsoring institution must provide the name of the training program, name, address, email, phone and fax numbers of the program director and curriculum vitae for any resident advisors.
2. The institution or affiliation of institutions that comprise the resources included in the training program must provide all the minimum training components described in the following standards.
3. Trainees must complete at least four years of formal training in laboratory animal medicine. A yearly activity report (Appendix 7) is to be filled and submitted by the Program Director to the LAMBC.
4. A description of the program and agreement of the approved facility to accept the resident (Appendices 1, 2 & 3) should be provided by the Applicant and approved by the Program Director which includes specific areas of training emphasis. The description should be in sufficient detail to ensure the broad remit of Laboratory Animal Medicine:

Laboratory Animal Medicine is that specialty of veterinary medicine that deals with the diagnosis, treatment, and prevention of disease in animals used in biomedical research. Its major tasks are:

- Prevention, diagnosis, control and treatment of diseases of laboratory animals including health
monitoring and the impact of microorganisms on research
- Prevention and alleviation of animal pain and distress
- Provision of research services (e.g. pre- and post-operative care, critical care, anesthesia and analgesia, euthanasia)
- Provision of research support (e.g. animal research techniques) and information (e.g. comparative and normative biology, nomenclature)
- Training of scientific, animal care and ancillary staff
- Development and management of animal husbandry programs (including genetic management)
- Design and operation of laboratory animal facilities
- Impact of the physical and social environment of laboratory animals
- Consultation and advice on compliance with laws, regulations and standards.
- Provision of opportunities for designing and conducting research projects within the broad field of laboratory animal medicine
- Preparation of animal use protocols and participation in their review
- Contribution to the humane use of animals in biomedical research together with the search for alternatives.

The resident must provide documentation of satisfactory completion of the Training Program. This documentation must be presented as originals and be signed by the Program Director.

5. A specialist veterinarian must serve as Program Director of the Training Program for individuals using this route to certification. The CCVSI requires that programs have at least one specialist veterinarian per three residents in the Program. Oversight must be provided by a specialist veterinarian for the entire period of the program. Additionally, specialist and non-specialist faculty must, in the aggregate, possess competency in all the diverse requirements of these Minimal Standards.

6. Recognizing the publication requirement for acceptance into the examination, it is recommended that the Training Program will describe how it contributes to the Resident having at least two original articles (and being the first author on at least one of them) which demonstrate application of scientific methods on subjects that are relevant to Laboratory Animal Medicine. These articles must have been published or accepted for publication in a peer reviewed journal. It is recognized that one or both of these articles may be prepared outside the part of the Training Program directly supervised by the Program Director, but usually the supervised Training Program will provide significant support to meet the publication requirement for admission to examination.

7. The biomedical research programs supporting the training effort should be described by the Program Director. The objective is to allow CCVSI to ensure that the broad remit of Laboratory Animal Medicine is covered and suitable facilities are available for training residents.

8. The Training Program must include a didactic component consisting of seminars and/or courses covering all the areas described in the requirements for a Training Program (Appendix 4) in this document. Minimally, the didactic program will consist of at least 200 hours of involvement during the course of the Training Program, usually performed by the faculty at the host institution. Other institutions may be accepted to provide training. An alternative source might be the participation in recognized professional meetings of Laboratory Animal Associations. Whatever the source of training the Program Director is responsible for providing a full description.

9. Training must include supervised experience in the practice of laboratory animal medicine. This should include clinical experience (which must include diagnosis, treatment, prevention and clinical and diagnostic pathology) with species, which fairly represent the current practice of laboratory animal medicine. Statistics on animal species and numbers used for experimental purposes as required by Law will be used as a guide. The supervised experience should also include participation in the administration of the institutions animal care and use program including interaction with investigators and any animal care and use committees.

10. Training must include a research component which involves the application of the scientific method as applied to a basic or clinical research project. The trainee may fulfill this requirement either through the conduct of an independent, original project or as a collaborator working with an established investigator. This project may contribute to the publication requirement for admission to examination.

The LAMBC can appoint, following the Program Director request, a resident advisor for any period of training in the CCVSI recognized Training Program. This resident advisor(s) should send a final written report on the period of training to the LAMBC.

**Administration of the training program**

The Program Director is responsible for:
- Providing facility, animal care and use and training program information to the LAMBC (Appendix 5)
- Liaison with Resident Advisors.
- The conduct of the overall Training Program.
- Directing the Resident to ensure the requirements of the Training Program are met.
- Meeting formally with the Resident to evaluate progress at least twice a year.
- Submitting a yearly activity report (Appendix 7) to the LAMBC.
The Resident is responsible for:

- Providing prior to the commencement of the Training Program, a current comprehensive curriculum vitae to the Program Director. (Appendix 1)
- Maintain throughout the four years of training and experience in laboratory animal medicine that are submitted for approval to the LAMBC, a training record (Appendix 6).
- This record shall include:
  - The start and finish date of any training, didactic training, courses, presentations, meeting attendance and all other training activities.
  - The name, date, signature of the assessor, senior institutional official or the Program Director.
- Training records used as part of an Institution's normal business are acceptable if they meet the above criteria
- Consulting with the LAMBC to ensure training during the Training Program will be acceptable toward the four years training and experience requirement if approved. The LAMBC will agree to the appointment of a resident advisor for any period of training during the Training Program
- Submitting the training record to LAMBC as required, and at least twice annually during the Training Program to the Program Director, is required.

The CCVSI and LAMBC are responsible for:

- Evaluation of Training Programs. The Board (CCVSI) will review the recommendations of the LAMBC and, in the event of minor discrepancies, will communicate with the Program Director in order to make a final decision.
- Evaluation of completion of training and experience for candidates for acceptance to the qualifying examination.
- Advice to potential specialist veterinarians on training and experience.
- Appointment of a Resident Advisor for any period of training during the Training Program. The Resident Advisor should send a final written report on the period of training, to the LAMBC.
- Communication of acceptance and deficiencies of Training Programs to Program Directors.
- Maintaining a list of approved Training Programs and making this list available as required.

Appendixes and forms are available on www.isrvma.org