

RESIDENCY TRAINING PROGRAM STANDARDS FOR QUALIFICATION BY ROUTE 3 OF THE BY-LAWS

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I. Objective

The objective of American College of Veterinary Microbiologists (ACVM) Residencies is to promote expertise and proficiency in a Recognized Veterinary Specialty (RVS) (bacteriology/mycology, immunology, virology, or parasitology) within the ACVM, which is an American Veterinary Medical Association Recognized Veterinary Specialty Organization (RVSO). These standards describe the framework for a qualified residency program which would fulfill the requirements needed by an applicant seeking eligibility to take the Board Examination via Route 3 (ACVM By-Laws.)

II. Definitions

AVMA – American Veterinary Medical Association

ABVS – AVMA American Board of Veterinary Specialties; this is the umbrella organization for veterinary specialties within the United States.

RVSO – AVMA ABVS-Recognized Veterinary Specialty Organization; e.g., the American College of Veterinary Microbiologists

ACVM – American College of Veterinary Microbiologists

RVS – Recognized Veterinary Specialty; a clearly defined unique subset of an RVSO based upon a species, discipline, or system related to that of the parent RVSO.

Program Advisor: The individual responsible for general program oversight including, but not limited to: submitting the program registration form; overseeing the ACVM Residency Training Program at the approved site; integrity and continuity of the program at the institution; ensuring adequate training in clinical microbiology to prepare the candidate for board examination; signing documentation verifying completion of the program by individual Residents; and correspondence with ACVM.

The Program Advisor is:

- Preferred: a Diplomate in good standing of any RVS within ACVM.
- Alternate: a Diplomate in good standing of a different RVSO within the AVMA American Board of Veterinary Specialties (if an ACVM Diplomate is not available.)
- Alternate: a Diplomate of the European Board of Veterinary Specialists, Fellow of the Australian College of Veterinary Scientists, or a Diplomate of the Royal College of Veterinary Surgeons (if an ACVM Diplomate is not available.)
- ACVM should be notified in a letter if an Alternate Program Advisor will be supervising the Residency program which states that the advisor accepts responsibility for the training program. Further information including a CV may be requested by the Board of Governors for clarification about the program.

Supervising Diplomate: An active ACVM Diplomate responsible for direct supervision of a Resident while this person is in clinical training. ACVM Diplomate Program Advisors may serve as Supervising Diplomate. Supervising Diplomates may not supervise more than three (3) Residents at one time, but may accept new Residents if one or more of their current Residents is scheduled to complete the Program within 3 months.

Residency Committee: A committee chaired by the Supervising Diplomate and consisting of individuals suited to provide training and mentorship for the Resident. The committee may

consist of other ACVM Diplomates, individuals with PhDs in veterinary microbiology or parasitology, specialists from other disciplines, or experienced technical staff who can provide guidance and review the progress of the Resident in the program.

Examination Qualifications Committee: a sub-committee of the broader ACVM examination committee that is charged with reviewing applications to sit for the ACVM Exam.

III. Summary of the ACVM Residency Program-Route 3

A residency training program in veterinary microbiology which meets guidelines for residents to apply via Route 3 should closely follow the ACVM recommendations and provide each resident with a Program Advisor, preferably an active ACVM Diplomate, and a Supervising Diplomate supported by a Residency Committee who directly monitor resident training. Additional mentorship provided by other specialists will enhance the Resident's training and should be built into the program. This residency training program is an intense, intimate partnership in learning that can only be accomplished with frequent and regular interactions and communication between a Supervising Diplomate and Committee with his/her Resident.

The ACVM residency program which qualifies for Route 3 application shall consist of a minimum of two (2) years (104 weeks) of supervised training and clinical experience in the science and practice of disciplines in microbiology as applied to veterinary medical science. Graduate studies may be included in the residency program for achievement of an advanced degree; however, time dedicated to a graduate program should not interfere with the clinical training in Veterinary Microbiology necessary to complete the residency to the satisfaction of the Residency Committee. Students enrolled in graduate programs may be eligible to apply through routes 1 or 2, and therefore these routes of application may better fit applicants that enroll in and complete these programs.

Evaluation of the Resident shall be performed by the Residency Committee at six (6)-month intervals, at which time the Committee will evaluate the status of the training and may make recommendations for additional work to enhance the breadth of instruction for the Resident. Summary reports of these evaluations should be maintained by the Program Advisor and be available to ACVM upon request.

Application for credentialing by Route 3 to sit for the ACVM examination can be made during the second year of the training program (after a minimum of 78 weeks) as outlined in the ACVM Bylaws. All residency requirements including completion of the full 104 weeks of the training program must be completed prior to taking the examination.

In general, no partial credit for residency programs is permitted. A Resident, deciding of his/her own accord to request a temporary leave from the residency program, will submit a letter to his/her Residency Committee with reasons for the request. The Program Advisor will then forward it, along with the Committee's recommendation, to the ACVM Examination Committee. If the Resident decides to continue the program, the Resident must submit a letter petitioning the Residency Committee to resume the residency program. The Program Advisor will then forward it, along with the Committee's recommendation, to the ACVM Examination Committee for final determination. If a prolonged period of time has passed (i.e. more than 1.5 years) the Examination Committee may require the individual pursue certification by way of Routes 1, 2, or 4, as defined in the Bylaws.

If a residency program is terminated by the sponsoring entity, the Program Advisor will provide a letter to the Exam Committee detailing the Resident's experience to consider approving additional experience credit on a case-by-case basis.

IV. Detailed Description of an ACVM Residency Training Program which fulfills requirements for Route 3 qualification

A. Scope of the training program

The goal of the residency training program is to provide opportunity for the development of knowledge and skills through exposure to a wide variety of microbiological diseases of animals, resulting in the ability to oversee clinical microbiologic procedures in the laboratory and contribute to the advancement of clinical veterinary microbiology through education, research, and diagnostic support.

The objectives of the program are to:

- 1. promote aptitude and clinical proficiency in veterinary microbiology diagnostics and diagnostic medicine;
- 2. provide learning opportunities to review in-depth the fundamentals of basic sciences as applied to the practice of veterinary microbiology;
- 3. provide instruction, mentoring and supervision of the Resident to adequately prepare him/her for the ACVM certification examination;
- 4. provide a suitable environment to facilitate training; this environment requires a commitment by the Program Advisor, Supervising Diplomate, support staff and administration, appropriate resources and facilities, and appropriate animal diagnostic caseload

B. Duration and distribution of time

The ACVM residency program is based on the common clinical residency duration of two (2) years (a minimum of 104 weeks with two (2) weeks of vacation per year). One week is defined as at least 5 days of at least 8 hours. The Supervising Diplomate will determine how the Resident's time will be allotted to various areas of clinical training.

C. Program Requirements

For an ACVM Residency Training Program which fulfills Route 3 requirements to be active, a Letter of Intent for Application must be sugmitted to ACVM which includes:

1. Appendix A form completed by the Program Advisor within three months of the start of the residency program. Exceptions to this time frame may be made form programs in which students are already enrolled and will be considered on a case by case basis.

- Appendix B completed by the Resident submitted at the same time as the program registration form. This form should include the name of the Supervising Diplomate. Employment of a Resident does not guarantee acceptability of the resident to become a candidate for examination.
- 3. Training must take place at a facility with a faculty/staff active in the RVS. The facility must provide diagnostic services consistent with the current standard of specialty practice as well as appropriate infectious disease caseload in the RVS. In addition, the following items must be available:
 - Library: a library must be accessible which contains recent text books and current journals representing all recognized clinical disciplines and basic sciences. Electronic access in lieu of physical access to these material is sufficient.
 - **Medical Records**: a comprehensive and retrievable filing system for medical records must be available, as well as appropriate photographic equipment.
- 4. Training programs must indicate in-writing to the resident how many patients, cases and depth of study thereof are required for the experiential portion their training.

V. Responsibilities of the Resident for Route 3 qualification

A. Case responsibility

The Resident will be expected to participate in all aspects of case management including sample receiving, sample preparation, performance of essential tests, client communication, results reporting, clinical case interpretation, and microbiology consultant. Timing of each component may vary depending on the stage of the training program.

B. Training Records

Each resident should maintain sufficient records (e.g. case identification numbers, summaries) to demonstrate satisfaction of the experiential diagnostic requirement of their program (see IV C4 above).

C. Publications

Residents are required to submit proof of acceptance for publication a minimum of two peer-reviewed publications, at least one of which is a first author paper in an appropriate journal. Journals that contain veterinary microbiology and/or parasitology within their scope, especially those that are relevant to clinical or diagnostic microbiology, are encouraged. Acceptable first-author, peer-reviewed publications will include:

- 1. Original research
- 2. Comprehensive retrospective studies
- 3. Case Reports
- 4. Short/brief communications
- 5. Comprehensive Review Article

Conference proceedings, clinical vignettes, letters to the editor, and serial features (e.g., "What's your diagnosis?") are encouraged but should not take the place of a peerreviewed publication. The manuscript topic should be in the RVS for which the Resident is seeking certification. The manuscript format will depend on the journal to which it will be submitted.

The data that provides the basis for the two publications must be different, but the broad topic can be the same (e.g. 2 different papers about BVDV are acceptable).

The manuscripts must have been published within three (3) years of the date of application. For example, if the application date is April 15, 2016, the date of publication cannot be prior to April 15, 2013.

Proof of publication or official acceptance for publication must be received by the Exam Committee by October 1 in order to sit for examination in November of that year. Official acceptance for publication consists of a letter (electronic or otherwise) from the journal indicating that the manuscript has been accepted for publication.

D. Presentations

Professional presentations are important for the training program and should be completed as often as possible during the residency. A brief summation of each presentation should be maintained in the Resident's log. Presentations may consist of:

- 1. Formal rounds, case presentations, seminars, journal clubs, and lectures to students, colleagues, or other outreach groups.
- 2. Focused presentations in an area of the RVS. These can be provided in local, regional, national, or international meetings at the direction of the Supervising Diplomate.
- 3. The Supervising Diplomate, Program Advisor, or designated substitute should provide feedback to the Resident on presentations as part of the mentorship responsibilities.

E. Semi-annual Evaluation

Approximately every six (6) months, Residents must submit evaluation materials to the Program Advisor including the following:

- 1. Brief description of the case responsibility work performed by the Resident
- 2. Status of any publications
- 3. Listing of oral presentations

These materials will be used by the Supervising Diplomate/Program Advisor to certify to the ACVM Exam Committee or designated subcommittee that the evaluation materials demonstrate sufficient progress to continue in the Residency program.

VI. Responsibilities of the Program Advisor for Route 3 qualification

A. Registering the program with ACVM

- **B.** Informing ACVM of substantial changes in the residency program, such as availability of ACVM Diplomates for direct supervision
- **C.** Providing the infrastructure for the Resident(s) to prepare the materials required by ACVM
- **D.** Monitoring the overall progress of the Resident(s)
- **E.** Certifying satisfactory semi-annual progress and completion of the residency program, including those listed in the Semi-annual Evaluation
- VII. Responsibilities of the Supervising Diplomate (if different from the Program Advisor) for Route 3 qualification
 - A. Direct supervision of the clinical activities of the Resident(s)
 - **B.** Verifying and approving the case responsibility work and other documentation required by the ACVM

VIII. Responsibilities of the Residency Committee for Route 3 qualification

- **A.** Provide guidance to Resident
- **B.** Review the progress of the Resident in the Training Program; provides feedback to the Resident, the Supervising Diplomate, and/or the Program Advisor

IX. Responsibilities of the ACVM and its respective boards and committees for Route 3 qualification

- A. Review and evaluate materials submitted by Program Advisors and Residents
- B. Request additional supporting materials if needed
- **C.** Evaluate applications for Board Examination qualification including:
 - a. An understanding of the fundamentals of bacteriology, mycology, virology, immunology, OR parasitology
 - Material of applied microbiology including ecological relationships relating to animal or human exposure and methods of prevention and control; detection and identification of microbiolgical agents; and immunological responses to microbial agents
 - c. Specialized knowledge in aspects of microbiology including molecular biology, biochemistry, and history related to the RVS(s) of emphasis for the candidate

Standards approved by the ACVM Board of Governors 3/8/2018

APPENDIX A - PROGRAM REGISTRATION INFORMATION-ROUTE 3

Please submit the following information to the Secretary of ACVM. For the Training Program to be considered active, this information should be received within 90 days of the date on which the residency training program initiates. Exeptions to this time requirement will be considered for programs from which students are already enrolled and will be considered on a case by case basis.

- A. A brief letter written by the Program Advisor or Supervising Diplomate that:
 - 1. describes the intent (including the RVS(s) of focus) for the training program along with starting and ending dates
 - 2. describes the facilities and caseload including
 - a. approximate number of tests performed each year, types of tests, and types of specimens, categorized by RVS (state "0" if the training program does not include a particular RVS)
 - i. Bacteriology / Mycology
 - ii. Virology
 - iii. Immunology
 - iv. Parasitology
 - b. facilities description including laboratory space, equipment type, and photographic capabilities.
 - c. medical records management system
 - d. library
 - 3. lists personnel who may be involved in the Residency Committee or other training
 - a. List professional personnel (i.e., those with a DVM, PhD, or equivalent degree) involved in the Resident Training Program; name, degrees/certifications, and whether the person will have direct supervision of the Resident.
 - b. List paraprofessional personnel (i.e., those without a DVM, PhD, or equivalent degree) involved in the Resident Training Program; name, degrees/certifications, and whether the person will have direct supervision of the Resident.
- B. Current curriculum vitae from the Program Advisor and CVs from Supervising Diplomates and other faculty/specialists who will be directly involved in Resident training.

APPENDIX B - NEW RESIDENT APPLICATION-Route 3

When a new Resident is identified, the following must be sent to the Examination Committee via the Secretary of ACVM. This must be done within 90 days of the beginning of the program. Exeptions to this time requirement will be considered for programs from which students are already enrolled and will be considered on a case by case basis.

If notice is not sent, then the Resident is considered unapproved. ACVM will not retroactively approve a Resident unless a specific exception has been approved.

- A. Name of Resident
- B. Start Date
- C. CV of Resident
- D. Names of Resident Committee members

After approval, ACVM will send a welcome letter to the Resident.

APPENDIX C - EVALUATION OF PROGRESS CHECKLIST-Route 3

The following components must be approved by the Residency Committee (including Supervising Diplomate) at each semiannual evaluation.

A. Length of time in the Training program: _____

B. Case Responsibility/Training Log

- 1. Summary of cases supervised by the Resident
 - a. Bacteriology/Mycology: _____
 - b. Virology: _____
 - c. Immunology: _____
 - d. Parasitology: _____
- 2. Types of samples handled and processed for testing:
- 3. Types of testing performed:
- 4. Examples of client communication and consultation:

C. Status of Publications

- 1. First-author Publication:
- 2. Any additional published material:

D. List and location of Presentations: