

WESTERN COLLEGE OF VETERINARY MEDICINE

DEPARTMENT OF SMALL ANIMAL CLINICAL SCIENCES

VETERINARY ANESTHESIOLOGY RESIDENCY TRAINING PROGRAM

I. Definition

The WCVM Anesthesiology Residency Program is a 3 year post graduate, clinical and academic program that will provide the opportunity to acquire an in-depth knowledge of veterinary anesthesiology and associated disciplines. At the completion of the program, the resident should meet the requirements established by the American College of Veterinary Anesthesiology and Analgesia (ACVAA) and the European College of Veterinary Anaesthesia and Analgesia (ECVAA) for eligibility to write the board examinations. Currently, at least two Boarded anesthesiologists are required for the standard residency ACVAA program (each 50% on-clinics), and one ECVAA Boarded anesthesiologist on clinics for 60% year for the standard residency ECVAA program. An ACVAA Boarded person can supervise an ECVAA track resident during clinical duty and vice versa, but not be supervisor. Residents must also register with their chosen College (ACVAA or ECVAA, or both) at the start of the residency program, as well as with the University.

The resident should enroll in the College of Graduate and Postdoctoral Studies in order to work towards a Master of Science degree (M.Sc.) in conjunction with the clinical program. This is a non-thesis degree which involves three years of clinical work, course work (24 credits) and a research project. Publication of the research project in a peer reviewed journal could serve towards credential requirements for Board examinations.

II. Objectives

- a. To provide an opportunity for the resident to develop a broad based, in depth knowledge of the fundamentals of Anesthesiology, Analgesia and Critical Care.
- b. To promote clinical expertise and facilitate proficiency in the diagnosis and management of anesthetic and critical care cases. This will be accomplished through exposure to routine and referral cases under the direction of the senior clinicians.

- c. To encourage independent thought and study and to provide a forum for the free exchange of knowledge and ideas. This will be done through informal case discussions, resident rounds and graduate seminars.
- d. To allow the resident to develop the skills required to pursue a variety of goals including lecturing, laboratory teaching, research, and clinical service.

III. Administrative Structure

The program is administered and controlled by the advisory committee with the designated department Graduate Chair acting as Chairperson.

A faculty advisor is appointed to coordinate the program and the resident's activities, and to act as a liaison person for the resident.

The clinical instructors are all of the anesthesia faculty and clinical associates in the anesthesia section plus clinicians in other specialties.

The responsibilities and duties of these groups are outlined below:

IV. Expectations

The following outlines the expectations for residents over the three year period and will provide a scale against which recommendation for promotion to the next year will be made. Throughout the program, residents are encouraged to discuss openly and honestly any problems or conflicts they may have. By maintaining open channels of communication, maximal benefit can be gained from the exchange of ideas by all those involved in the program.

Year I

- a. Become familiar with the daily operation of the clinic and associated VMC protocols.
- b. Attend daily undergraduate teaching rounds when on clinical duty.
- c. Attend seminars and case discussions.
- d. Discuss and establish long term goals and interests with the advisor.
- e. Enroll in the College of Graduate and Postdoctoral Studies and register for courses for year one. (See SACS Graduate Student Handbook for procedure and dates.)
- f. A grant is usually obtained by faculty, but the research project should be executed in the first year.

- g. Satisfactorily complete all requirements for the courses in which the student is registered.
- h. By the end of year one, the resident is expected to have demonstrated critical enquiry, independent thought and an ability to function as part of a team in a teaching environment.
- i. Demonstrate progress in the management of anesthetized and critical care patients.
- j. Maintain thorough case-logs and fulfill training requirements and ensure reports are submitted as per the ACVAA or ECVAA residency guidelines.

Year II.

- a. By the end of year two, most courses required for the M.Sc. must be satisfactorily completed.
- b. By the end of year two, all research work must be completed, data accumulated and the initial draft of the manuscript written in a form suitable for publication.
- c. Attend Department Seminars
- d. Develop proficiency in leading undergraduate anesthesiology rounds.
- e. Any external courses or clinical experiences should be complete.
- f. Demonstrate continued progress in anesthetic management of anesthetized and critical care patients.
- g. Develop other ideas for research and execute. Grant writing is optional, but encouraged.
- h. Maintain thorough case-logs and fulfill training requirements and ensure reports are submitted as per the ACVAA or ECVAA residency guidelines.

Year III

- a. The majority of the 3rd year should be spent in clinical training at an independent level. The level of responsibility delegated to the resident will be based on his or her ability. The resident should be proficient at running the clinic floor and immediate decision-making.
- B The research project and results must be presented at a formal college seminar and defended to obtain the Masters. Submit the results of the research project for publication. The aim is to have a publication in the third year.
- c. Submit additional manuscripts for publication.
- d. The 3rd year resident will share the responsibility of conducting undergraduate teaching rounds while they are maintaining a clinical service.
- e. Develop some experience in didactic teaching where appropriate.
- f. Maintain thorough case-logs and fulfill training requirements and ensure reports are submitted as per the ACVAA or ECVAA residency guidelines.
- g. All case reports must be written for ECVAA residents.

V. Evaluation of Performance

The resident must satisfy the course requirements of the College of Graduate and Postdoctoral Studies (see calendar) for the graduate degree.

Performance in the clinical residency program will be evaluated on an ongoing basis by the Advisor and by the department Graduate Chair.

Every six months the Advisor will solicit information from department and other associated faculty, and provide to the resident a formal evaluation of clinical and academic performance.

Written records will be maintained in the resident's file.

Training reports and/or case-logs should be submitted annually to the ACVAA or ECVAA as per their residency guidelines.

Case-logs and number of weeks with a Boarded Anesthesiologist should be recorded and reviewed at the Committee meetings.

Case reports must also be reviewed at Committee meetings for ECVAA residents

VI. Responsibilities

It is considered important that the expectations and ambitions of all parties concerned are clearly established and articulated so as to minimize misunderstanding. The following is intended to outline, in a general fashion, the responsibilities of the resident, the advisory committee and the resident advisor.

A. Resident

1. Clinical Duty

A duty schedule will be established and residents will work under the supervision of the faculty/Boarded or Board-eligible clinical associates and will assume responsibility for the daily management of cases to which they have been assigned. During the first two years of the program, there will be some conflict between clinical duties and graduate courses. This is unavoidable, but adequate communication should minimize this inconvenience. While the resident advisor is responsible for the overall program, all department faculty members and clinical associates are involved in the clinical training of each resident. It is important to establish a good working relationship with all clinicians requiring anesthesia services and to adapt to individual variations in protocol and viewpoints that different senior anesthesiologists may have. Over the three year program, there will be a transition from close supervision by anesthesiology faculty to a situation where the third year resident will be allowed more independence with more indirect supervision.

The rate of this transition will depend on the abilities of the individual resident. The basic clinic duty-rota is usually scheduled as 6 weeks on-clinics with 2 weeks off-clinics throughout the 3 year program. This basic rota can be re-organized to allow externships, and research with discussion with other anesthesia clinicians.

As much as possible, the resident will be given priority for challenging cases and new clinical training opportunities. .

2. After Hours Duty and Weekends

During the 1st, 2nd and 3rd years, residents will share primary call with the clinical associates. Residents will be scheduled on duty after hours with a faculty member as back-up (available by telephone) for the first year. In later years, advice can be obtained from faculty and the clinical associates if necessary. In the first year, plans for the management of cases admitted after hours must be discussed with the back-up anesthesiologist and this is constantly evaluated so that the appropriate level of involvement of the back-up faculty can be established for each type of case. For example, the resident might feel comfortable to anesthetize a healthy, paraplegic dog, but may require faculty to be on-site for a colic or septic abdomen. Any problems encountered in the course of managing a case should be brought to the attention of either the resident advisor or the appropriate Chief of Service.

Call is set using a 1:3 rota with 1 week on duty and two weeks off duty, but it is expected the resident be present for the day-work despite a heavy night workload. Long weekends and holidays to be shared equally with clinical associates and resident as per rota.

3. Teaching

Residents will be involved in the clinical teaching of second, third and fourth year DVM students and in so doing should attempt to adhere to currently accepted theories and philosophies. If a change in an established protocol is thought desirable, this should be discussed with the duty clinician. Clinical cases constitute our teaching material and the active exchange of ideas between faculty, residents and students is encouraged.

4. Licensing requirements

All residents are required to be registered with the Saskatchewan Veterinary Medical Association. Payment of the fees and obtaining a valid license is the responsibility of the resident.

5. Courses for M.Sc. and research project

The courses and the research project should be selected in consultation with the advisory committee and the resident advisor. Application for enrollment into the College of Graduate and

Postdoctoral Studies should be done immediately upon acceptance to a Residency position. Registration for courses to be taken in the first year should be completed by September so courses need to be selected as soon as possible. The appropriate number of courses per year will be determined for each resident and during the first two years of the program the resident will be given time out of the clinic for academic pursuits. During the third year of the residency program, proportionally more time will be spent in the clinic as there should be less course work.

Degree Requirements:

- GSR 960 Introduction to Ethics and Integrity (required in first term)
- GSR 962 Ethics and Integrity in Animal Research (required in first term)
- VSAC 990 Seminar (register in Fall and Winter of each year)
- VSAC 992 Project (register in every term throughout entire program)
- VSAC 980 Clinics (register in every term throughout entire program)

Clinical Competency – 12 credit units

- VSAC 873.4 Advanced Clinical Practice I (year 1)
- VSAC 873.4 Advanced Clinical Practice II (year 2)
- VSAC 873.4 Advanced Clinical Practice III (year 3)

Research and Discipline-specific, Foundational Knowledge – 12 credit units minimum

Required:

- VSAC 878.3 Small Animal Anesthesiology
- VSAC 898.3 Special topics course for basic sciences in anesthesia and large animal anesthesia.
- VSAC 898.3 Special topics course in Measurement of Cardiac Output

Optional:

- VLAC 881.3 Clinical Trial Design and Analysis
- An external Field Experience VSAC 802.3 or VSAC 803.6 may be incorporated.
- Other courses may be considered.

Residents should aim to carry out their research project during the summer at the end of their first year. Residents must register with the College of Graduate and Postdoctoral Studies for summer session. (This will also make them eligible for income-tax deductions.) In order to graduate, the

research project must be written in form acceptable for submission to a scientific journal. Ideally, the research should be already published.

6. Other academic pursuits

The resident should discuss with their advisor other plans such as the publication of additional papers and attendance at scientific meetings. Residents are encouraged to use some of their academic time to attend scientific meetings but these plans should be made well in advance in consultation with the advisor and the anesthesia section if duties require rearrangement. Presenting the results of their research at the residents' forum at the EVCAA, ACVAA or at the IVECCS meetings should be an objective of each resident. Additional scholarly activities are encouraged and suitable plans developed to facilitate these activities.

7. ECVAA and ACVAA requirements

The resident should, as soon as possible, acquire access the most recent ECVAA and ACVAA residency guidelines on their respective websites. The requirements for board certification are outlined, and the resident should use this information in conjunction with this document in the planning of his/her program.

8. VMC Manual

A VMC manual is available online which outlines the daily procedures and protocols of the clinic. The resident should be familiar with this manual.

9. Vacation

The resident is entitled to three weeks vacation during the year and plans for vacation should be cleared with the advisor and anesthesia section as early as possible once they have been made so as to facilitate the establishment of duty schedules.

10. Parking.

You should make application to the University Parking Office for a parking space as soon as possible. Parking space is at a premium and even more difficult to get once the students have returned.

B. Resident Advisor

1. The resident advisor will be responsible for the day to day liaison with the resident and will be the person who will facilitate the academic, clinical and research efforts of the resident. The supervisor will be Boarded ECVAA or ACVAA depending on the residency program enrolled.
2. The advisor will assist in the selection of appropriate courses for the M.Sc. program. Final approval of the program will be by the Graduate Advisory Committee.
3. Should assist the resident in the selection and execution of the research project. This may also include establishing contacts with other faculty who have particular expertise that may benefit the resident's program. The research should ideally be completed and data analyzed by end of the first year.
4. The advisor should ensure that the resident has been supplied with current copies of this document, the University Calendar, the VMC manual and the ECVAA and ACVAA website details. The resident is encouraged to take responsibility for ensuring that residency guidelines are being met.
5. It is the advisors responsibility to solicit from faculty, and provide to the resident, evaluation of clinical and academic performance. This should be done every six months and written records maintained in the residents file.

C. Advisory Committee

1. An advisory committee will be established as soon as possible and shall consist of the Graduate Chair, the resident advisor, one other veterinary anesthesiologist or another member considered appropriate according to ACVAA or ECVAA residency, department and university regulations. The department head, in consultation with the resident and the advisor, is responsible for establishing and appropriate committee for the program.
2. The Chairperson, in consultation with the advisor shall be responsible for calling meetings at least every six months to discuss progress, problems and requirements. The first such meeting should be held as soon as possible and not later than 90 days after the arrival of the resident.