

AMERICAN COLLEGE OF VETERINARY SURGEONS

RESIDENCY TRAINING STANDARDS AND REQUIREMENTS

JULY 1, 2018–JUNE 30, 2019**



Published May 2017. Amended May 2018 to include the policies approved by the ACVS Board of Regents regarding supervision of surgery residents by Diplomates of the European College of Veterinary Surgeons. These policies apply to residents whose training begins on or after July 1, 2018.

Updated Nov 2018—A new Orthopedics – Joint Replacement category has been added to the small animal curriculum to improve tracking of the existing three joint replacement procedures requirement. The Orthopedics – Other category has been decreased by three cases to reflect this change. Residents with joint replacement cases to be reclassified into the new category should contact jmelia@acvs.org. See page 75.

**Programs must be recognized by ACVS as a registered residency training program prior to training residents. Applications for program registration must be received by August 21, 2017, for new programs wishing to train residents for the July 2018-June 2019 residency year.

Residency Training Standards and Requirements

The policies and procedures outlined in this document are in effect for residency program sites planning to train residents and for residents whose training starts between July 1, 2018 and June 30, 2019.

CONTENTS

- Introduction 6
 - Process to Achieve Board Certification..... 6
- Terminology 7
 - Terminology to be Used in Professional Advertising/Identification 7
- Residency Training Program Registration 9
 - Description of Program Types 9
 - Traditional Residency Training Program 9
 - Collaborative Residency Training Program 9
- Personnel Requirements 10
 - Supervising ACVS Diplomates 11
 - Supporting ACVS Diplomates 12
 - Allied Specialty Diplomates 12
 - Program Director 13
 - Resident Advisor 14
- Resident Supervision by Diplomates 16
 - Supervision of Educational Events 16
 - Supervision in the Operating Room 16
 - Supervision During Clinical Rotations 16
 - Supervision of Research 17
- Resident Numbers 17
- Required Equipment and Facilities 17
 - Medical Library 18
 - Medical Records 18
 - Office Equipment 18
 - Pharmacy/Dispensary 18

Hospital Facility.....	18
Diagnostic Imaging Equipment.....	18
Pathology Services.....	19
Surgical Facilities.....	19
Notification of Substantive Change in the Program	21
Process and Procedures for Attaining Residency Training Program Registration	22
Registration of a New Program	22
Annual Renewal of the Training Program.....	23
Review by the Residency Program Compliance Committee.....	23
Program Probation and Suspension	24
Probation	24
Suspension.....	26
Appeals	27
Monitoring Program Compliance with ACVS Requirements	27
Resident Training Requirements	28
Weeks of Training.....	29
Surgical Service Rotations.....	29
Weeks of Training in Non-Surgical Pursuits.....	31
Remainder of Activity Weeks	31
Emergency Duty.....	32
Surgery Cases.....	32
External Surgical Rotations	34
Research	35
Seminars	35
Surgery Residents' Rounds Presentations	35
Educational Events.....	36
Conferences.....	36
Clinical Teaching	36
Specialty Service Rotations.....	36

Anesthesia Specialty Service Rotation—Small Animal Surgery Residents.....	39
Anesthesia Specialty Service Rotation—Large Animal Surgery Residents	41
Diagnostic Imaging Specialty Service Rotation—Small Animal Surgery Residents.....	43
Diagnostic Imaging Specialty Service Rotation—Large Animal Surgery Residents.....	45
Internal Medicine/Critical Care Specialty Service Rotation—Small Animal Surgery Residents.....	47
Internal Medicine/Critical Care Specialty Service Rotation—Large Animal Surgery Residents.....	49
Clinical and Anatomic Pathology Specialty Service Rotation—Surgery Residents	51
Semi-Annual Evaluation of the Resident	53
Time Limits.....	54
Documentation of Training by the Resident and Resident Responsibilities.....	54
Resident Training Log System	55
Sequence of Responsibilities	56
Accessing the Resident Training Log	57
Evaluation by the Resident Credentialing Committee.....	58
Discontinuation of a Resident’s Training	58
Transferring to a New Residency Training Program	59
Residency Questions or Concerns	59
Publication Requirement.....	60
Criteria for Acceptance of a Publication	60
Petition to Add Publication to Approved Journals List	61
Optional Early Review of Publication Accepted in an Approved Journal.....	62
Credentials Application.....	63
Examination	64
Eligibility for the Phase I Examination	64
Phase I Surgical Knowledge Examination	64
Eligibility for the Phase II Examination	65
Phase II Surgical Competency Examination	65
Maintenance of Certification.....	66
Forms and Fees.....	67

Filing of Residency Paperwork.....	67
Residency Fees.....	67
Payment of Fees	67
Refunds.....	68
Forms.....	68
Large Animal Curriculum—Equine Emphasis.....	70
Large Animal Curriculum—Equine Emphasis continuation	71
Large Animal Curriculum—General	72
Large Animal Curriculum—General continuation.....	73
Small Animal Curriculum	74
Small Animal Curriculum continuation	75
Timeline for Residency Training	76
Year 1.....	76
Year 2.....	77
Year 3.....	78

American College of Veterinary Surgeons
19785 Crystal Rock Drive, Suite 305
Germantown, MD 20874

Phone: 301-916-0200 or Toll free: 877-217-ACVS (2287)

Program Registration questions x120

Resident Requirements questions x102

Examination questions x111

Fax: 301-916-2287

Email: residency@acvs.org

Website: www.acvs.org/residents

Resident Training Log: <http://rtl.acvs.org>

Application system: www.acvs.org/apply

INTRODUCTION

The American College of Veterinary Surgeons (ACVS) is the American Veterinary Medical Association recognized specialty board which sets the standards for advanced professionalism in veterinary surgery. ACVS establishes the standards for post-graduate residency training and acts as the agency by which veterinarians are certified as specialists in surgery.

A veterinary surgery residency is a training program allowing a graduate veterinarian (“resident”) to acquire in-depth knowledge of veterinary surgery and its supporting disciplines under the supervision and guidance of Diplomates of the American College of Veterinary Surgeons (“Diplomate”).

Objectives of a Veterinary Surgery Residency:

- A. To promote aptitude and clinical proficiency in the diagnosis, operative treatment, and postoperative management of animals with surgical disease(s).
- B. To provide the resident with instruction in the science and practice of veterinary surgery and its supporting disciplines.
- C. To provide the resident with the opportunity to pursue career goals in teaching, research, clinical service, and/or specialty practice.

PROCESS TO ACHIEVE BOARD CERTIFICATION

In order to achieve board certification, residents must obtain each of the credentials outlined below.

- A. Acceptance into an ACVS [Registered Residency Training Program](#).
- B. Successful completion and approval of all [Resident Training Requirements](#).
- C. Successful submission and acceptance of a scientific manuscript in an approved journal as outlined in the [Publication Requirement](#).
- D. Submission and acceptance of a [Credentials Application](#).
- E. Successful passing of all components of the [Examination](#).

ACVS reviews veterinary surgery residency training programs, including the physical training sites that provide and monitor veterinary surgical training. This review is to help ensure 1) that residents are receiving training in appropriate environments and 2) that adequate reporting of resident training information is conducted. However, ACVS does not approve, certify, accredit, warrant, guarantee, or otherwise promise any results or outcome with respect to any such practice or training site. ACVS has no liability for the conduct or actions of a residency practice or training site, or for any resident or Diplomate, to any practitioner, resident, or member of the public.

TERMINOLOGY

ACVS Diplomate: The ACVS Constitution states that members of the ACVS will be known as “Diplomates.” This title implies that the member has successfully completed a residency program, has had his or her credentials application approved, has successfully completed the certifying examination, and is in good standing.

Allied Specialist / Allied Specialty Diplomate: A board-certified Diplomate from an American Veterinary Medical Association Recognized Veterinary Specialty Organization other than ACVS.

Program (Registered Residency Training Program): An institution or practice or a collaboration of institutions and/or practices that provide the personnel, facilities, caseload, and educational experiences required to train residents in either large animal surgery or small animal surgery to meet minimum standards for ACVS board certification. Programs must be registered by ACVS in order to train residents.

Program Director: An ACVS Diplomate in good standing responsible for organizing and administering a program for training surgery residents.

Residency: A course of study by a veterinarian at a registered residency training program that enables the veterinarian to meet minimum requirements in clinical experience/caseload, research, education, and allied specialty medicine.

Resident: A veterinarian who has completed a rotating internship or equivalent practice experience and has been selected to participate in a registered residency training program that meets the minimum standards.

Resident Advisor: An ACVS Diplomate in good standing who is assigned to one or two residents in a registered residency training program to guide the resident(s) through training.

Supervising Diplomate: An ACVS Diplomate with appropriate expertise and training who participates in all facets of resident training and participates in clinical service for a minimum of 400 hours per year.

Supporting Diplomate: An ACVS Diplomate with appropriate expertise and training who participates in some, but not all, aspects of resident training or who participates in clinical service for less than 400 hours per year.

TERMINOLOGY TO BE USED IN PROFESSIONAL ADVERTISING/IDENTIFICATION

It is the position of the American College of Veterinary Surgeons that the term “specialist” be reserved for the exclusive use of those veterinarians who have successfully completed a residency training program and passed a certifying examination in their claimed discipline. The term “surgeon” may be used only to refer to ACVS board-certified veterinary surgeons.

Residents are considered to be in training as surgeons for the duration of the residency program, and must not be referred to as “specialists”, “Diplomates”, or “surgeons”.

- Active residents may use such terms as: “resident in veterinary surgery” or “veterinary surgery resident”.
- Individuals who have completed residency training, but are not board certified by ACVS may indicate only that their practice is “limited to the practice of surgery.”

No connection to the ACVS may be implied by active or post-program residents. The terms “board eligible,” “board qualified”, “credentials accepted by ACVS”, “specialist”, “Diplomate” or “surgeon” should not be used. *An individual who identifies their professional credentials using these terms may be eliminated from the credentials application or examination process.*

Diplomates should refer to the website for advertising policies: www.acvs.org/board-certified-status-terminology.

RESIDENCY TRAINING PROGRAM REGISTRATION

A registered residency training program is intended to prepare residents for ACVS board certification by providing training, supervision, research opportunities, didactic education, and clinical experience in small or large animal surgery. This may be accomplished as a single-site (“traditional”) training program or through collaboration among 2-3 training sites. *The ACVS Diplomate(s) acting as Program Director and Resident Advisor must be in the same institution/practice as the resident for traditional training programs. For collaborative training programs, the Program Director must be located at the primary site and the Resident Advisor should be located at the site where the resident spends the most time.*

Programs must be recognized by ACVS as a registered residency training program prior to training residents. **The deadline to submit an Application for Residency Training Program Registration is August 21, 2017.** This deadline applies to:

- A. Renewal of all currently registered programs (i.e., programs whose registration expires June 30, 2018)
- B. First-time applicants whose program has not previously been registered by ACVS
- C. Inactive programs who wish to train residents again

Training programs will be notified of the outcome of their applications by **December 1**.

DESCRIPTION OF PROGRAM TYPES

Residency training programs may be registered by ACVS as either traditional or collaborative programs in small animal surgery or large animal surgery.

TRADITIONAL RESIDENCY TRAINING PROGRAM

- The resident receives training at one practice/institution which meets all requirements for training, supervision, didactic education, and clinical experience.
- Specialty Service Rotations may be completed at secondary practices/institutions as approved by the Resident Advisor.
- External Surgical Rotations (not in excess of 10% of their training) may be completed at secondary practices/institutions as approved by the Resident Advisor.

COLLABORATIVE RESIDENCY TRAINING PROGRAM

Collaborative residency training programs are those which meet one of the following criteria: (a) the resident’s training will occur at more than one practice/institution (including multi-site regional practices) throughout the residency or (b) residents will need to be sent off site to a practice/institution other than the primary site for greater than 10% (11 weeks) of the resident’s supervised surgery weeks. *These 11 weeks do not include time spent on specialty service rotations in anesthesiology, diagnostic imaging internal medicine/critical care, and pathology.* The intent of the collaboration must be to enhance the quality of resident training. The preferred maximum number of collaborators in any one training program is three (3); the committee will consider applications with greater than three sites if the training experience is beneficial to the resident.

Clarification: Criterion B refers solely to surgical rotations.

Collaborative residency training programs may include:

- Collaboration between two or three academic institutions
 - Collaboration between two or three private practices
 - Collaboration between academic institutions and private practices
 - Multi-site private practices within a relatively small geographic area
- A. All component practices/institutions in a collaborative training program must meet all ACVS requirements. However, if one of the component practices/institutions in a proposed collaborative training program fails to meet all ACVS requirements, the Residency Program Compliance Committee may review the application and make a determination whether or not to register the program based on the amount of time a resident will spend at that practice/institution and the benefits that site brings to the training program.
- B. One component practice/institution of the collaboration must be designated as the “Primary Training Practice/Institution” and is responsible for managing the training program, ensuring compliance with ACVS requirements, and submitting the required registration application.
- C. A single practice/institution may participate in more than one collaboration as long as each collaboration complies with ACVS training requirements for resident supervision.
- D. During the registration process, the collaborative residency training program must:
1. Describe how the 156-week program will be divided among practices/institutions.
 2. Designate where specific components of resident training will occur.
 3. Describe how rounds and other educational events will be managed.
 4. Confirm that residents will receive exposure to a minimum of two ACVS Diplomates and indicate the amount of time the Diplomat is available at the residency site.
 5. Describe how each participating site meets the minimum personnel (ACVIM (IM) and other allied specialists), equipment, and facility requirements set by ACVS for surgery residency training.
- E. Practices/institutions that utilize multiple different sites (e.g., a practice with two locations or an academic institution with an affiliated off-site clinic) to train surgical residents should apply as a collaborative residency training program and provide the requested information relative to each training site.

PERSONNEL REQUIREMENTS

A program must meet these minimum personnel requirements to receive recognition by ACVS as a registered residency training program:

- Two full-time, Supervising ACVS Diplomates
- One Diplomat of the American College of Veterinary Internal Medicine (Small Animal or Large Animal Internal Medicine)
- Two additional AVMA-Recognized Veterinary Specialists for small animal programs
- One additional AVMA-Recognized Veterinary Specialist for large animal programs

Individuals with board certification from multiple AVMA-Recognized Veterinary Specialty Organizations can only be counted once toward personnel requirements

SUPERVISING ACVS DIPLOMATES

An ACVS registered residency training program must consist of a minimum of **two full-time, Supervising ACVS Diplomates** working in the same private practice or academic institution as the resident. Two Supervising ACVS Diplomates are required to establish a training program and may train up to three residents. One additional Supervising ACVS Diplomat is required for each additional resident beyond three. The program must have a sufficient number of Supervising Diplomates to provide supervision of residents for the entirety of the residency, particularly during surgery rotations (e.g., a program with only two Diplomates each working on clinics 400 hours per year would not meet supervision requirements).

A Supervising ACVS Diplomat is one who actively participates in resident training, including participation in rounds, journal reviews, seminars, and other educational events. A Supervising ACVS Diplomat is responsible for direct supervision of a resident while that resident is in clinical training. The Supervising ACVS Diplomat and resident are participating in a clinical practice in which both the Diplomat and the resident interact while on clinical duty and share in case management responsibility.

Requirements of a Supervising ACVS Diplomat *also include*:

- A. A Supervising ACVS Diplomat must participate in clinical service (seeing patients and performing surgery) for a **minimum of 400 hours per year**.
- B. During this clinical service, a Supervising ACVS Diplomat **must be available for telephone consultations at all times and available in-person within 1 hour of being contacted**. An ACVS Diplomat that primarily has “back-up” or “on-call” duty may only claim the hours in which they are actively advising residents towards supervising status (i.e., hours spent as “back-up” or “on call” without interaction with the residents cannot be counted towards the required 400 hours per year of clinical service). The emphasis is that the Supervising ACVS Diplomat must be physically present at the clinical facility, actively engaged with the resident, and in clinical service to patients (see [Supervision During Clinical Rotations](#)).
- C. The Supervising ACVS Diplomat must possess appropriate expertise for species germane to the training of the resident and procedure as recognized by the ACVS (e.g., large animal trained Diplomates training small animal residents must be Dual Certified by ACVS or certified by ACVS prior to 2001).
- D. A Supervising ACVS Diplomat must provide appropriate case consultation and presence on the clinic floor on a daily basis, be in-house while the resident is performing non-emergency surgery, and be available for consultation when the resident is performing emergency surgery (see [Supervision in the Operating Room](#)).
- E. One Supervising ACVS Diplomat may supervise up to two residents concurrently while active on the clinic floor (see [Resident Numbers](#)).
- F. A Supervising ACVS Diplomat is expected to maintain appropriate professionalism, attire, and behavior when interacting with residents during the training period, including in the operating room.
- G. A Supervising ACVS Diplomat must be in “good standing” with the ACVS (see definition, Section 3 of the ACVS Constitution).

While [Diplomates of the European College of Veterinary Surgeons \(ECVS\)](#) may supervise a limited portion of a resident's training, they are not counted toward personnel requirements for program registration and cannot serve as Program Director or Resident Advisor.

CHANGES IN NUMBERS OF SUPERVISING ACVS DIPLOMATES

The Program Director is responsible for notifying ACVS in advance of planned changes in personnel and within 15 days for unplanned changes (see [Notification of Substantive Changes](#)). If the number of Supervising ACVS Diplomates in a program decreases below the required minimum based on the number of residents in training, **the program will be placed on [probation](#) and be given a two-month grace period to replace the absent specialist** (or establish an external surgical rotation or partnership with another ACVS Diplomate that will allow residents proper exposure to the specialty, which is approved by the Residency Program Compliance Committee).

After the two-month grace period, if the number of Supervising ACVS Diplomates does not meet the requirement or an alternate plan has not been approved by the Residency Program Compliance Committee, the program will be [suspended](#).

The **impact upon residents of [probation](#) and [suspension](#)** is detailed later in this document.

SUPPORTING ACVS DIPLOMATES

Supporting ACVS Diplomates are those with appropriate expertise and training who contribute to resident training, but do not meet the requirements of a Supervising ACVS Diplomate. For example, this would include ACVS Diplomates with large administrative assignments and fewer than 400 hours per year of clinical assignment or ACVS Diplomates who participate in only some portions of the resident's training. Supporting Diplomates must have appropriate expertise and training. Though Supporting ACVS Diplomates contribute to the training program, *they are not counted when determining the minimum number of Diplomates required in a program.*

ALLIED SPECIALTY DIPLOMATES

Allied Specialty Diplomates are board-certified Diplomates from an American Veterinary Medical Association Recognized Veterinary Specialty Organization other than ACVS. Allied specialists are expected to guide the resident through direct, personal, one-on-one instruction throughout the residency. These allied specialists must be onsite and actively involved in resident training.

Minimum requirements* are:

SMALL ANIMAL TRAINING PROGRAMS

- One Diplomate of the American College of Veterinary Internal Medicine (Small Animal Internal Medicine)
- Two additional Diplomates from any AVMA-Recognized Veterinary Specialty Organization other than ACVS.

LARGE ANIMAL TRAINING PROGRAMS

- One Diplomate of the American College of Veterinary Internal Medicine (Large Animal Internal Medicine)
- One additional Diplomate from any AVMA-Recognized Veterinary Specialty Organization other than ACVS.

*Individuals with board certification from multiple AVMA-Recognized Veterinary Specialty Organizations can be counted only once toward personnel requirements.

PROGRAM DIRECTOR

The Program Director shall be responsible for the administration and continuity of the program.

- A. The Program Director must be a Diplomate of the ACVS in good standing. The Program Director may be either a Supervising or Supporting ACVS Diplomate.
- B. The Program Director must be present at the same institution as the resident for traditional training programs. For collaborative programs, the Program Director must be located at the primary training site.
- C. One Program Director may administer small and large animal programs.
- D. The Program Director is responsible for verification of pre-residency training, presence of suitable surgical facilities and equipment, and access to specialists in other disciplines required for the entire duration (156 weeks) of an ACVS Veterinary Surgery Residency.
- E. The Program Director is responsible for submitting **the Application for Residency Training Program Registration** and for submitting an application for renewal of program registration by the annual August deadline (i.e., August 21, 2017).
- F. The Program Director must notify ACVS of any substantive changes in a program in advance of planned changes or within 15 days of unplanned changes ([Notification of Substantive Change in the Program](#)). *Failure to notify ACVS will place that program in jeopardy of probation or suspension.*
- G. The Program Director serves as ACVS's primary point of contact with the residency training program. The Program Director is responsible for ensuring that all issues or concerns including program registration and renewal and other policies are communicated with other personnel.
- H. The Program Director must register each resident with the ACVS office within 30 days of initiation of the residency by sending a [Program Director's Statement](#) to the ACVS office. A copy of the Program Director's Statement can be obtained from the ACVS website. Questions on page 2 of the form must be completed by the Program Director for all residents. The Program Director should give a copy of this completed form to the resident, which should be retained by the resident.
 1. The resident's training at an ACVS registered residency training program is not recognized by ACVS until this form is filed and the resident and Program Director have received confirmation of receipt of the Program Director's Statement from the ACVS office via email. Petitions for retroactive recognition of residency initiation will be denied.
 2. Program Directors must file a form for each resident under their supervision including transfers from other programs.

3. The Program Director must provide individual email addresses for both the Program Director and the resident. All communication regarding the residency training program will be via email.
- I. A [Change in Program Director](#) form must be submitted to ACVS in advance of a planned change of Program Director. A copy of this form should be given to each resident in training at the time of the change. Should an unplanned change be necessary, the form must be filed within 15 days of the change ([Notification of Substantive Change](#)).
- J. The Program Director should ensure that the matriculation fee has been paid to the ACVS office within 30 days of each resident's program start date. In cases where a resident transfers to a program during their residency, the new Program Director should ensure that the transfer fee has been paid within 30 days of the date of transfer.
- K. The Program Director is responsible for assigning a Resident Advisor to each resident within the first calendar quarter after initiation of the residency program.
- L. The Program Director is responsible for developing a residency training plan in conjunction with the Resident Advisor and resident that meets all ACVS veterinary surgery resident training requirements. Questions regarding this plan should be addressed to the ACVS office or Director of the Resident Credentialing Committee.
- M. The Program Director is encouraged to review the proposed [Phase I examination](#) reading material and plan for the resident to be trained on these materials during the first year and a half of the residency.
- N. The Program Director is responsible for evaluating the web-based Semi-Annual Reviews submitted by the Resident Advisor for each resident. All Semi-Annual Reviews must be verified within a timely manner. These reviews should be completed in conjunction with the [twice-yearly evaluation of the resident](#). The first review must be completed and verified before **February 1** each year. The second review must be completed and verified before **August 1** each year ([Sequence of Responsibilities](#)).
- O. The Program Director is responsible for initiating Program Completion in the Resident Training Log system when a resident has completed all training requirements and all items have been entered by the resident and verified by the Resident Advisor in the Resident Training Log.
- P. The Program Director must notify the ACVS office within 30 days of the [discontinuation of a resident's training](#) at his/her institution. This information should be included in the final Semi-Annual review completed for the resident by the Resident Advisor.

RESIDENT ADVISOR

The Resident Advisor shall be responsible for administration and evaluation of the general and specific program requirements for the resident.

- A. The Resident Advisor must be a Diplomate of the ACVS in good standing.
- B. The Resident Advisor must be a Supervising ACVS Diplomate. A Supervising Diplomate can serve as Resident Advisor for up to two residents.

- C. The Resident Advisor must be in the same institution/practice as the resident for traditional residency training programs. For collaborative residency training programs, the Resident Advisor must be located at the site at which the resident spends the most time.
- D. The Resident Advisor must possess appropriate certification of expertise for species germane to the training of the resident as recognized by ACVS (e.g., large animal trained Diplomates training small animal residents must be Dual Certified by ACVS or certified by ACVS prior to 2001).
- E. The Resident Advisor must file a [Registration of Resident Advisor](#) for each resident with the ACVS office within the first calendar quarter of initiation of the program. A copy of the Registration of Resident Advisor form can be downloaded from the ACVS website. The Resident Advisor should give a copy of this completed form to the resident, which should be retained by the resident.
- F. A Registration of Resident Advisor form must be filed for each resident when the Resident Advisor changes. It is the responsibility of the new Resident Advisor to file the Registration of Resident Advisor form to signify the change in responsibilities. The ACVS office will send confirmation of receipt of this form via email.
- G. The Resident Advisor is responsible for:
 - 1. Conducting [semi-annual progress and performance evaluations](#) with the resident.
 - 2. Verification of all elements of the Resident Training Log ([Sequence of Responsibilities](#)):
 - a. Verification of all surgery cases.
 - b. Verification of all activity weeks. Note: all supervisors must still be listed for the Activity Log, but only the Resident Advisor “signs off” on the weekly activity.
 - c. Verification of all seminars.
 - d. Completion of online Semi-Annual Reviews that document the resident’s attendance at rounds, the status of the research project, and the results of the semi-annual progress and performance evaluation, and indicate whether the resident is continuing in the program. These reviews should be completed in conjunction with the twice-yearly evaluation of the resident. Denied training must be noted at time of review ([Semi-Annual Evaluation of the Resident](#)).

All elements of the resident’s log (cases, weeks, seminars and Semi-Annual Reviews must be verified and submitted for Resident Credentialing Committee review together ([Sequence of Responsibilities](#)) The first six months of training review must be completed and verified before **February 1** each year. The second six months of training must be completed and verified before **August 1** each year.

Note: documentation of specific components of the resident’s training will not be submitted to the RCC until a Semi-Annual Review has been submitted by the Resident Advisor and approved by the Program Director for the six-month period during which those training items were completed.

- H. The Resident Advisor is encouraged to coordinate with the Program Director a plan for the resident to be trained in the material covered by the Phase I examination during the first year and a half of the residency.
- I. The Resident Advisor must provide an individual email address to the ACVS. All communication regarding the residency training program will be conducted via email.

- J. In the event a resident is not continuing in the program, the Resident Advisor will need to finalize the log ([Discontinuing a Residency](#)).

RESIDENT SUPERVISION BY DIPLOMATES

All Supervising ACVS Diplomates and allied specialists are expected to guide the resident through medical, surgical, and academic training by direct, personal, one-on-one instruction. Guidance is to occur throughout the residency.

SUPERVISION OF EDUCATIONAL EVENTS

The resident is required to attend educational events beyond daily case management discussions (rounds) and seminar presentations. **Educational events include sessions such as journal or textbook reviews, morbidity/mortality rounds, and formal case presentations among residents and Diplomates.** These educational events must occur at least once every two weeks throughout the residency training period. Educational events are tracked in the Resident Training Log.

Clarification:
Educational events more fully described.

Educational events can only be counted in the residents' logs if an ACVS Diplomate was present and actively participating in discussions. Verification by the Resident Advisor will confirm that a Diplomate was present and engaged at the educational events.

SUPERVISION IN THE OPERATING ROOM

At least 50% of the cases in each Core Curriculum Category ([Large Animal -Equine Curriculum](#), [Large Animal-General Curriculum](#), [Small Animal Curriculum](#)) must be directly supervised by a Diplomate of the ACVS or, when appropriate, by a Diplomate of ACVIM-Neurology, a Diplomate of ACVO, or a Diplomate of AVDC. If an ECVS Diplomate serves as faculty/staff at a residency training program, **cases supervised by the ECVS Diplomate will count as directly supervised only when they occur during a week supervised by that ECVS Diplomate** and meet the requirements for direct supervision as noted below.

NEW: Limitation on ECVS Diplomate supervision of surgery cases.

Initially, supervision and instruction are expected to be strict; the resident is gradually allowed more independence with experience ([Surgery Cases](#)). However, *it is expected that continued interaction on the clinic floor will occur for the entirety of the training program.* Primary responsibility for training of junior residents is not to fall on senior residents. Working with a senior resident is not considered direct supervision.

For surgical cases to be considered "[directly supervised](#)," the Supervising or Supporting ACVS Diplomate must be present in the operating room and engaged in the procedure (whether scrubbed or not) for at least 25% of the procedure, and the ACVS Diplomate must contribute substantially to the decision making required for the case.

SUPERVISION DURING CLINICAL ROTATIONS

Residents must be supervised by an ACVS Diplomate for a minimum of 110 weeks of clinical activity. A single ACVS Diplomate (Supervising or Supporting) can supervise up to 2 residents while on clinic duty. The Diplomate Supervisor must possess appropriate expertise for species germane to the training of the resident and procedure.

A single resident can have no more than 75% of their clinical activity weeks supervised by any one Supervising ACVS Diplomate.

For a resident's surgical rotation to be considered "supervised" (annotated in the resident's Activity Log as a "Surgical Rotation Supervised by an ACVS Diplomate"), a Supervising or Supporting ACVS Diplomate must be available in person or by phone for consultation at all times while the resident is on duty; and that ACVS Diplomate must be physically present to assist with clinical case management, including surgery, within one hour.

When residents are on emergency duty, the Supervising or Supporting ACVS Diplomate must be available by phone and/or computer (for photographs and email) for consultation, must be readily available to provide direct assistance by being physically present if needed, and must be actively engaged with the resident in clinical service to patients.

If a residency training program employs [Diplomates of the European College of Veterinary Surgeons](#) (ECVS) as faculty/staff, the ECVS Diplomates can supervise up to 30% (33 weeks) of a resident's required 110 weeks of surgical rotations. ECVS Diplomates must meet the species and availability requirements outlined above. *ECVS Diplomates are not counted toward personnel requirements for program registration.*

NEW: ECVS Diplomate supervision of surgery weeks.

SUPERVISION OF RESEARCH

The resident must complete an investigative project that uses the scientific method. Additionally, residents must spend at least 18 weeks of their program in pursuit of the research project or in scientific manuscript preparation. An ACVS Diplomate with appropriate expertise must supervise and participate in the resident's research project.

RESIDENT NUMBERS

With two Supervising ACVS Diplomates comprising a program, **the program is permitted to train up to three surgical residents at one time.** One additional Supervising ACVS Diplomate is required for each additional resident over three.

A Resident Advisor can be assigned to no more than two residents.

A single ACVS Diplomate may supervise only two residents at a time during clinical duty.

A single resident can have no more than 75% of their clinical activity weeks supervised by any one ACVS Diplomate.

No more than two residents may log a single surgical case during a single anesthetic episode.

REQUIRED EQUIPMENT AND FACILITIES

Each program site must have all of the required equipment and facilities.

Facilities, including clinical environment, are required to be conducive with the performance of research necessary to meet resident training requirements.

MEDICAL LIBRARY

A library must include all textbooks and journals (hard copy or online) listed on the ACVS examination reading list.

MEDICAL RECORDS

A complete, retrievable, individual medical record must be maintained for each case. An electronic medical record is preferred, though hybrid electronic/paper medical records that allow search capability are permitted.

OFFICE EQUIPMENT

Facilities must provide computer equipment for use by Diplomates and residents necessary for:

- Maintenance of ACVS logs and residency documentation
- Manuscript preparation
- Internet and email access

PHARMACY/DISPENSARY

The pharmacy/dispensary must be stocked with commonly used drugs including antibiotics, analgesics, and narcotics required to provide standard of care for surgical patients and critical patients.

The practice, or an individual in the institution/practice, must hold a valid DEA license and comply with regulations for managing and recording controlled substances.

HOSPITAL FACILITY

The hospital must be suitable for housing animal patients preoperatively, during recovery from anesthesia, and postoperatively. The hospital must also allow the provision of 24-hour care, intensive care capability, and isolation facilities. The hospital must be equipped to provide the current standards of care in the profession.

DIAGNOSTIC IMAGING EQUIPMENT

Appropriate equipment for comprehensive diagnostic imaging and image processing must be available onsite.

LARGE ANIMAL TRAINING PROGRAMS

Required diagnostic imaging equipment:

- Digital radiography
- Digital diagnostic ultrasonography
- Endoscopy capability (including a flexible scope that is capable of gastroscopy in an adult horse)
- Must have at least one of the following: Computed Tomography (CT), Magnetic Resonance Imaging (MRI), or nuclear medicine

Clarification: Flexible endoscope redefined.

Recommended additional diagnostic imaging equipment

- CT
- MRI
- Nuclear medicine capability
- Dynamic endoscopy
- Fluoroscopy

NEW: Fluoroscopy equipment is recommended.

SMALL ANIMAL TRAINING PROGRAMS

Required diagnostic imaging equipment:

- Digital radiography
- Digital diagnostic ultrasonography
- CT or MRI

Recommended additional diagnostic imaging equipment:

- Intraoperative fluoroscopy
- Nuclear medicine
- CT
- MRI

PATHOLOGY SERVICES

CLINICAL PATHOLOGY

A clinical pathology laboratory for hematologic, clinical chemistry, and blood gas analysis must be available onsite. Microbiologic and cytologic capability must be available onsite or via send-out. A microscope must be onsite.

Clinical pathology reports must be retained and retrievable.

ANATOMIC PATHOLOGY

A separate area (other than an OR suite) must be available for gross pathologic examination and collection of samples during necropsy. Services for histopathologic examination of surgical and necropsy specimens must be available (either onsite or send-out). Anatomic pathology reports must be retained and retrievable.

SURGICAL FACILITIES

OPERATING SUITE

The operating suite must be consistent with current concepts of aseptic surgery and standard of care. The suite must include availability of suction, electrocautery, adequate surgical lighting, and appropriate surgical tables. The sterile surgery room(s) must be of appropriate size for the patient, staff, and associated equipment. The sterile surgery room(s) must be ventilated according to current concepts of aseptic surgery. Emergency lighting must be

available. Adjacent room(s) shall be provided for induction and postoperative recovery. Appropriate surgical attire must be worn in the operating room.

LARGE ANIMAL TRAINING PROGRAMS

- It is recommended that surgical site preparation, dentistry, and surgery of infected sites not be performed in the sterile surgery room.
- Facilities for standing surgery (stocks) must be available.

SMALL ANIMAL TRAINING PROGRAMS

A separate room (other than the sterile suite) must be available for dentistry and surgery of infected wounds.

ANESTHETIC AND CRITICAL CARE EQUIPMENT

An anesthetic machine with precision vaporizer, a positive-pressure ventilator and a physiologic recorder, including blood pressure and electrocardiographic monitoring, are required.

PHOTOGRAPHY

Photographic equipment for documentation of surgical disease is required.

STERILIZATION

Steam sterilization capability is required and must be commensurate with the surgical case load. The facility must also be able to adequately sterilize heat-sensitive items (onsite or via send out) in an appropriate manner (other than cold sterilization).

SURGICAL INSTRUMENTATION

A full complement of general and special instrumentation for diagnostic and operative surgery of all body systems must be available.

LARGE ANIMAL TRAINING PROGRAMS

Required surgical instruments:

- Minimally-invasive surgical capability (laparoscopy and arthroscopy)
- Full complement of orthopedic instruments necessary for fracture reduction and stabilization
 - Internal fixation: bone plating
 - External coaptation
 - Surgical bone saw or surgical drill
- Full complement of soft tissue surgical instruments necessary for common and advanced abdominal procedures
- Surgical stapling devices

Recommended surgical instruments:

- Arthrobur/synovial resector
- Cryotherapy
- Surgical laser capability
- Vessel sealing device

SMALL ANIMAL TRAINING PROGRAMS

Required surgical instruments:

- Minimally invasive surgical capability (laparoscopy, thoracoscopy, and arthroscopy) including a vessel sealing device
- Orthopedic instruments necessary for:
 - Stifle: osteotomy and extra-capsular stabilization
 - Fracture reduction and stabilization
 - Internal fixation: including bone plating
 - External fixation: linear and circular fixators
 - External coaptation
 - Appropriate surgical bone saws
 - Surgical drill
- Soft tissue instruments necessary for common and advanced abdominal and thoracic procedures (including surgical stapling devices)
- Neurosurgical instruments necessary for surgical management of spinal fractures, cervical vertebral instability, laminectomy procedures, and management of lumbosacral instability

Recommended surgical instruments:

- Endoscopy equipment
- Interlocking nail capability
- Joint replacement instrumentation
- Instrumentation for advanced minimally invasive procedures: Electronic insufflator, endo-stapling equipment, minimally invasive suturing device, minimally invasive suctioning and irrigation device, retrieval bags, and a laparoscopic retractor.

NOTIFICATION OF SUBSTANTIVE CHANGE IN THE PROGRAM

Substantive changes that are planned or anticipated in a residency training program must be submitted to ACVS for approval prior to implementation of those changes. Substantive changes are changes to personnel and to facilities or equipment that would prevent a program from continuing to meet minimum standards. **Substantive changes that are unplanned must be submitted to ACVS no more than 15 days after the change occurs.** *Changes which result in the program no longer meeting minimum standards may result in [program probation or suspension](#).*

Significant changes to personnel include the following:

- The [number of Supervising ACVS Diplomates](#) in a program decrease below the required minimum based on the number of residents in training.
- The number of required [non-ACVS specialty Diplomates](#) decrease below the required minimum.
- The current Program Director leaves the institution/practice, retires, ends his or her service as Program Director, takes a leave of absence, or is otherwise unable to meet his or her responsibilities.
- A Resident Advisor leaves the institution/practice, retires, ends his or her services as Resident Advisor, takes a leave of absence, or is otherwise unable to meet his or her responsibilities.

PROCESS AND PROCEDURES FOR ATTAINING RESIDENCY TRAINING PROGRAM REGISTRATION

Applications for Residency Training Program Registration are required for all prospective training programs, as well as for renewal of currently registered training programs. The application deadline is August 21, 2017. Applications must be submitted online at www.acvs.org/apply before 11:59pm Eastern time, August 21, 2017. ACVS will not accept late applications for any reason, including computer/internet issues.

REGISTRATION OF A NEW PROGRAM

Prospective training programs must identify an ACVS Diplomate to serve as [Program Director](#). Program Directors must complete the online **Application for Residency Training Program Registration**. New Program Directors must contact the Residency Program Administrator at residency@acvs.org in order to obtain appropriate access to submit an application.

Separate applications must be submitted for Small Animal programs and for Large Animal programs, even if the same Diplomate is serving as Program Director for both species types. Additionally, institutions that have different Program Directors for Large Animal-Equine and Large Animal-General must submit separate applications. Institutions/practices applying as **collaborative residency training programs** must submit one application per group of collaborators.

The application must be signed by the Program Director and all Supervising and Supporting ACVS Diplomates participating in the program, and the department chair (or someone in an equivalent administrative rank, such as practice owner). Collaborative programs must obtain signatures from administrators at each site. Signature verifies compliance with ACVS residency program site requirements and agreement with ACVS resident training objectives and ethics. All signatories will be notified by email and provided a link to review and sign the application. Applications with missing signatures are not accepted.

The Application for Residency Training Program Registration must be submitted online no later than August 21, 2017. Programs must have a current registration in order to accept new residents for training between July 2018 and June 2019. Portions of a resident's training initiated prior to registration of the program by the ACVS will not count toward completion of the residency requirements unless the ACVS caused the delay during the application process.

Updated: Application deadline is August 21.

Programs that use the Veterinary Internship and Residency Matching Program (VIRMP) must provide in their program descriptions information about their current registration status with ACVS. Programs will be notified of the outcome of their applications by December 1 and should amend their VIRMP listings accordingly. More information on the matching program can be found at www.virmp.org.

ANNUAL RENEWAL OF THE TRAINING PROGRAM

All training locations and collaborative sites must renew their registration each year. An **Application for Residency Training Program Registration** must be submitted online at www.acvs.org/apply annually by the Program Director to confirm compliance with all ACVS residency training program requirements. The application must be signed by the Program Director, all Supervising and Supporting ACVS Diplomates participating in the program, and the department chairperson (or someone in an equivalent administrative rank, such as practice owner). Collaborative programs must obtain signatures from administrators at each site. Signature verifies compliance with ACVS residency program requirements and agreement with the ACVS resident training objectives and ethics. The application must be submitted online by the stated deadline each year to maintain status as a registered residency training program. *Failure to submit the Application for Residency Training Program Registration by the deadline will result in the program being placed on probation.*

APPLICATION FOR REINSTATEMENT OF A SUSPENDED PROGRAM

A suspended program may apply for reinstatement of registration once the deficiencies causing suspension have been corrected. **Applications for reinstatement of a suspended program will be accepted twice annually—February 15 and at the annual August application deadline (i.e., August 21, 2017).** The Program Director must submit a completed application indicating a request for reinstatement by the stated deadline.

The Program Director must contact ACVS to gain access to the current application. The application must be signed by the Program Director, all Supervising ACVS Diplomates participating in the program and the department chairperson (or someone in an equivalent administrative rank, such as practice owner). Collaborative programs must obtain signatures from Supervising ACVS Diplomates and administrators at each site.

REVIEW BY THE RESIDENCY PROGRAM COMPLIANCE COMMITTEE

The Residency Program Compliance Committee (PCC) will review all applications for compliance with ACVS residency training requirements.

- A. During the review process, committee members may contact Program Directors for additional information. **Program Directors must respond to these inquiries within 15 days.**
- B. Programs deficient in one or more aspects of the ACVS residency training requirements will be notified of the deficiencies by email to the Program Director, all Supervising Diplomates, all Supporting Diplomates, and the department chair or equivalent responsible individual. **The Program Director will have 15 days to amend the application or demonstrate a plan for correction of the deficiencies.**
- C. Amended applications and plans for correction of deficiencies will be evaluated by the PCC.
- D. A recommendation will be submitted by the PCC to the ACVS Board of Regents for all applications.

Programs will be notified via email by December 1, 2017, of the outcome of their applications. Programs will receive one of the following statuses:

Registered: Programs meeting all requirements will be notified (via the Program Director) of their status as an ACVS registered residency training program.

Not registered: New programs that fail to meet a significant portion of the requirements will not be registered by ACVS.

On probation: Programs that submit an application for renewal, but do not meet all of the requirements will be placed on probation and subject to all deadlines and policies as outlined in [Program Probation and Suspension](#).

Suspended: Programs that submit an application for renewal, but fall significantly short of requirements will be suspended.

PROGRAM PROBATION AND SUSPENSION

Programs may be placed on probation or on suspension during the annual review of registration applications, or throughout the year based on changes to personnel or facilities. [Residents in training](#) at the time of probation can continue to count training toward ACVS requirements; [residents in suspended programs](#) cannot count training.

No new residents may begin a residency at a program that is on probation or suspended. The exception to this policy is if the resident was officially matched to the program through the Veterinary Internship Residency Matching Program (VIRMP) prior to the program being placed on probation. In this circumstance, the resident will enter the program subject to the requirements of a program on probation. The Program Director is required to notify all new residents matched to the program within 15 days if the program status changes. VIRMP has worked with ACVS to document information about the registration process into the matching system. Residents can choose to decline the match without sanctions by the VIRMP if they are matched to a program that is not registered by ACVS or that is placed on probation by ACVS.

ACVS will notify programs regarding program deficiencies, probation, or suspension via email to the Program Director, all Supervising ACVS Diplomates, all Supporting Diplomates, and department chair (or practice equivalent) via email. Residents in the program will also be copied on all communications involving the program's status. In addition, each program's updated status (registered, on probation, suspended) will be posted on the ACVS website.

The ACVS has the right to revoke the registration of any residency training program for cause. For example, submission of fraudulent information on the Application for Residency Training Program Registration may result in a program being placed on probation or suspension.

The ACVS has the right to restrict an ACVS Diplomate from serving in a training or administrative role in response to prior failure to comply with published residency training requirements or fraud or misrepresentation in the training of residents.

PROBATION

An ACVS registered residency training program may be placed on probation for the reasons listed below. The length of the probationary period will vary depending on the issue. Failure to resolve the issue during the probationary period will result in the suspension of the program. Communication regarding resolution of deficiencies should be addressed to the Residency Program Compliance Committee and emailed to residency@acvs.org. The ACVS office will facilitate communication with the appropriate committee members.

[Residents in training](#) at the time of probation can continue to count training toward ACVS requirements; [residents in suspended programs](#) cannot count training.

- A. Failure by the Program Director to submit a complete and signed application for renewal of the program's registration by the deadline.

Probationary period: 15 days

Resolution: The program will have 15 days to submit the application. The program will be suspended if the application has not been submitted within the probationary period.

- B. Failure by the Program Director to respond to the ACVS within 15 days of notification of a program deficiency during the application review process. The response must include an explanation of how the deficiency was corrected (or a plan for resolution).

Probationary period: 0 days

Resolution: Failure to respond during the 15-day response period will result in suspension.

- C. Failure to meet the minimum personnel requirements for Supervising ACVS Diplomates (2 Supervising ACVS Diplomates required) or to have a sufficient number of Supervising ACVS Diplomates for the number of residents currently in training.

Probationary period: 2 months

Resolution: If the number of Supervising ACVS Diplomates does not meet minimum requirements, the program will be placed on probation and have two months to correct the deficiency—either replace the missing ACVS Diplomate or establish a relationship with another ACVS Diplomate (i.e., establish a partnership that will allow residents proper exposure to the specialty) that is approved by the Residency Program Compliance Committee. **The Program Director must email their proposed plan for compliance to the Residency Program Compliance Committee at residency@acvs.org prior to the end of the two months in order to avoid suspension of the program.**

If, after the two-month grace period, the number of Supervising ACVS Diplomates at the program site does not meet the minimum requirement (two Supervising ACVS Diplomates) or have the appropriate ratio of Diplomates to residents and no alternate plan for compliance has been approved by the PCC the program will be suspended.

- D. Failure to meet the minimum personnel requirements for allied specialty Diplomates (ACVIM (Internal Medicine), etc.).

Probationary period: 6 months

Resolution: Programs on probation for an insufficient number of allied specialty Diplomates will have six months to replace the specialty Diplomate or establish a relationship with another specialty Diplomate (thereby providing the required exposure for residents) that is approved by the Residency Program Compliance Committee.

If, after the six-month grace period, the number of non-ACVS specialty Diplomates at the program site does not meet minimum requirements, the program will be suspended.

- E. Failure to comply with ACVS residency training requirements other than minimum personnel requirements.

Probationary period: 30 days

Resolution: The program will have 30 days to correct the deficiency or submit a plan for resolution to the Residency Program Compliance Committee.

- F. Failure of the Resident Advisor and/or Program Director to review training in the Resident Training Log (Resident Advisor verifies activity weeks, cases, specialty service training, educational events, and seminars; Resident Advisor creates Semi-Annual Review; Program Director approves Semi-Annual Review) prior to the established deadlines (February 1 and August 1).

Probationary period: 6 months (through the next deadline for log review—February 1 or August 1)

Resolution: The program will be placed on probation until the required approvals or resident reviews are completed. Failure to complete the required approvals or resident reviews in six months will result in program suspension.

IMPACT OF PROBATION ON RESIDENTS

During the probationary period, the resident’s training (e.g., logged cases, seminars, rounds, educational events, etc.) should be added to the Resident Training Log. These items will be reviewed following the next log deadline. Approved items will be counted towards minimum resident training requirements.

Clarification: Resident training counts during probation.

SUSPENSION

Programs that fail to resolve issues within the stated probationary period for that issue will be suspended.

IMPACT OF SUPENSION ON RESIDENTS

Upon suspension of the residency training program, all residents’ training will become inactive, training logs will not be reviewed, and any training that occurs during suspension will not be counted towards the credentialing process. The residents’ training may resume when the program reapplies and is reinstated by ACVS.

Clarification: Residents cannot count training during suspension.

No new residents may begin training at a program that is suspended.

REINSTATEMENT OF A SUSPENDED PROGRAM

A suspended program may apply for [reinstatement of registration](#) once the deficiencies causing suspension have been corrected. **Applications for reinstatement of a suspended program will be accepted twice annually—February 15 and at the annual August application deadline (i.e., August 21, 2017).** The Program Director must submit a completed application at www.acvs.org/apply indicating a request for reinstatement by the deadline.

APPEALS

The Program Director of a non-registered or suspended program may submit an appeal to the Board of Regents by submitting a written petition as outlined in the Appeals Procedure for reconsideration only on the grounds that the determination: (a) disregarded the established criteria; (b) failed to follow the stated procedures; or (c) failed to consider relevant information and documentation presented. Contact the ACVS office to obtain a current copy of the Protocol for Processing of Appeals and Grievances.

MONITORING PROGRAM COMPLIANCE WITH ACVS REQUIREMENTS

Several methods will be used by the Residency Program Compliance Committee to monitor compliance of residency training programs with ACVS requirements:

- A. The committee will consider all information provided during application for registration and renewal of the program.
- B. Surgery residents will be asked to submit a program evaluation survey at the completion of their training programs. The evaluation will assess the resident's perception of the program's level of compliance with ACVS training program requirements.
- C. If warranted, the Residency Program Compliance Committee may visit a particular training site (perform a site visit), audit records related to the training program, or request additional information to determine a training program's suitability for registration, to obtain information relative to a training program's request for removal of probationary status, or to investigate serious complaints reported by current or past residents regarding a program's compliance with ACVS training program requirements. Complaints from residents regarding matters that do not directly relate to ACVS training program compliance including but not limited to sexual harassment, discrimination, or other criminal activities, are not within the purview of the Residency Program Compliance Committee and instead should be directed to appropriate governmental authorities, including the police, as applicable to the situation.

RESIDENT TRAINING REQUIREMENTS

To meet one of the criteria for admission to the ACVS the applicant must have devoted a minimum of four years after graduation from veterinary school to special training and experience in veterinary surgery. The following sequence of training is to be used:

- A. A rotating veterinary internship, or its equivalent. Prospective residents will be required to have broad training and experience in clinical veterinary medicine and surgery and their supporting disciplines, which must be attained by participation in an internship of 12 months' duration or its equivalent, as a prerequisite to enter a residency training program. ACVS leaves the determination of equivalent training to the Program Director or registered residency training program.
- B. A three-year Veterinary Surgery Residency ("residency"). The residency shall consist of a minimum of three (3) years (156 weeks)* of supervised training, postgraduate education, and clinical experience in the science and practice of veterinary surgery and its supporting disciplines under the supervision of ACVS Diplomates and other AVMA-recognized specialists. Residents must choose to follow either the Large Animal or Small Animal Curriculum. Graduate degree studies may be included in the residency. Continuing education programs, as the sole method of training, will not meet the requirements for certification as a Diplomate.

Residencies must be completed before August 1 of the year that final credentials are submitted. All residents must submit required forms and documentation with the ACVS at the start of their training and upon any change of program location.

*An alternative residency must meet the same criteria, but may be done over a longer time period (longer than the traditional consecutive 156 weeks). *This alternative track allows a significant degree of flexibility for a candidate to satisfy requirements in up to twice the typical time.*

Examples of alternate training programs to meet ACVS requirements:

- Combined graduate degree program—specific weeks during the graduate program are designated for ACVS training requirements (clinical rotations, research/manuscript, etc.). Activities which do not directly augment ACVS training objectives should not be considered part of resident training. Several academic institutions have already instituted 4-year residencies that fall into this description.
- Private practice—an individual could function as a resident part-time in a particular practice with ACVS supervision for several weeks or months at a time. Yet the requirements must still be completed in 6 years. The time away from the practice where the part-time residency is being done could be spent practicing as a veterinarian in that practice or another practice. The Program Director and Resident Advisor must be present at the practice where the training is taking place. This scenario would also apply to all residents in practices or academic institutions that take leave of absence for medical or family problems.

An alternate track for an ACVS residency must be agreed upon by the individual and the Program Director and/or Resident Advisor, even if it satisfies the description listed by ACVS. All the specialty service rotations, manuscript requirements, and documentation of the residency apply to the candidate in an alternate training program.

The residency consists of the following elements:

- 156 weeks of supervised training with 110 weeks of supervised surgical training
- Emergency duty
- Surgery cases with specified numbers in different systems
- Research, which may include manuscript publication ([Publication Requirement](#))
- Seminars
- Surgery residents' rounds presentations
- Educational events
- Conferences
- Clinical teaching
- Specialty training in anesthesia (including cases), diagnostic imaging, internal medicine/critical care, and clinical and anatomic pathology (including cases)
- Twice annual performance evaluations
- Tracking of all training in the Resident Training Log system
- Evaluation of training by the Resident Credentialing Committee

Detailed requirements for each of these elements are documented below.

WEEKS OF TRAINING

The resident must complete a minimum of 156 weeks of training. A week is defined as 5 days of training during a 7-day period. All requirements defined in these standards as “weeks” must meet this criterion. Accumulating single days of training over a longer time period and counting those days as a week is not acceptable.

All 156 weeks are recorded in the Activity section of the Resident Training Log indicating the *predominant activity* for the week as the Assignment. Weeks of training may be referred to as “activity weeks” in relation to their classification in the online log system.

Residents must indicate for each week in the activity log where the training occurred. The logs will default to the primary training location. *Residents should change the location for weeks spent at secondary sites at collaborative residency programs and for travel to non-program locations for [external surgical rotations](#).*

Clarification: Location of activity weeks should be indicated.

SURGICAL SERVICE ROTATIONS

Surgical service rotations facilitate development of knowledge, skill, and proficiency in veterinary surgery via exposure to a wide variety of surgical diseases with the guidance and collaboration of experienced veterinary medical specialists.

- A. At least 110 weeks of the 156-week residency must be spent on a surgical service under the direction of an ACVS Diplomate. A single resident can have no more than 75% of their clinical activity weeks (85 weeks) supervised by any one Supervising ACVS Diplomate. The remaining 25 weeks must be supervised by an alternate ACVS Diplomate.

For training programs that employ Diplomates of the European College of Veterinary Surgeons (ECVS) as faculty/staff, *ECVS Diplomates may supervise up to 30% (33 weeks) of the resident's required 110 supervised surgery weeks*. The resident must have a minimum of 70% (77 weeks) supervised by an ACVS Diplomat. ECVS Diplomates do not count toward the 25 weeks of alternate ACVS Diplomat supervision.

NEW: ECVS Diplomat supervision of surgery weeks.

Rotations may be recorded in the Resident Training Log as a “Surgical Rotation Supervised by an ACVS Diplomat” in the following situations:

1. Rotations supervised by a Supervising or Supporting ACVS Diplomat.
2. Rotations supervised by an ACVS Diplomat at an [external location](#).
3. Neurosurgery: For residents training at institutions where neurosurgery is not performed by Diplomates of the ACVS, rotations on neurosurgical services headed by ACVIM Diplomates (Neurology) may be counted as “Surgical Rotations Supervised by an ACVS Diplomat”. Note: Neurosurgery weeks counted as Diplomat supervised surgical rotation weeks must be exclusive of those counted as [specialty service rotations](#) in internal medicine. Rotations on neurosurgical services headed by individuals who are not ACVS or ACVIM (Neurology) Diplomates must be counted as “Surgical Rotations Supervised by a non-Diplomat.”
4. Ophthalmology: For residents training at institutions where ophthalmology surgeries are not performed by Diplomates of the ACVS, rotations on ophthalmology services headed by ACVO Diplomates may be counted as “Surgical Rotations Supervised by an ACVS Diplomat”. Rotations on ophthalmology services headed by individuals who are not ACVS or ACVO Diplomates must be counted as “Surgical Rotations Supervised by a non-Diplomat.”
5. Dentistry & Oral Surgery: For residents training at institutions where dental surgeries are not performed by Diplomates of the ACVS, rotations on dentistry services headed by AVDC Diplomates may be counted as “Surgical Rotations Supervised by an ACVS Diplomat”. Rotations on dentistry services headed by individuals who are not ACVS or AVDC Diplomates must be counted as “Surgical Rotations Supervised by a non-Diplomat.”

Rotations should be recorded in the Resident Training Log as a “Surgical Rotation Supervised by an ECVS Diplomat” in the following situations:

NEW: Recording ECVS supervision in the activity log.

1. The ECVS Diplomat is employed as faculty/staff at the residency training program.
2. The ECVS Diplomat has species appropriate training.
3. The ECVS Diplomat adheres to the availability requirements for a clinical rotation supervisor.

No more than 30% of the resident's surgery weeks may be classified as ECVS supervised.

- B. Resident Responsibilities: The degree of responsibility assumed by the resident shall be appropriate to the nature of the surgical procedure and training experience. The resident on a surgical service shall be responsible for:

1. Receiving clinic appointments and obtaining history and pertinent information from client
2. Supervising daily management of hospitalized animals
3. Participating in or performing surgical procedures on the cases they manage
4. Participating in clinical teaching (graduate or primary care veterinarians, staff, interns)
5. Providing optimal clinical service and prompt professional communications

WEEKS OF TRAINING IN NON-SURGICAL PURSUITS

The majority of a resident's training must be spent on a surgical service. However, time spent in other activities is considered highly beneficial and required for a well-rounded residency training experience. **Training programs are required to give their residents adequate time away from the hospital activities to meet all other training requirements.** Residents must meet minimum requirements for research and manuscript preparation and specialty service rotations.

RESEARCH/MANUSCRIPT WEEKS

Residents must spend at least 18 weeks of their program in pursuit of the research project or in scientific manuscript preparation. These weeks are tracked in the Resident Training Log using the "Research/Manuscript" classification. This research may lead to the publication used by the resident to meet the [Publication Requirement](#).

SPECIALTY SERVICE ROTATIONS

Residents must spend time training in allied specialties—anesthesia, diagnostic imaging, internal medicine/critical care, and clinical and anatomic pathology. Large Animal residents spend 5-8 weeks on these rotations. Small Animal Surgery residents spend 6-9 weeks on these rotations. Certain rotations may be completed either as full weeks or as hours, as documented under [Specialty Service Rotations](#). Rotations that are spent as full weeks are recorded in the Resident Training Log using the "Other Specialty Training" designation. All rotations are also documented in the log in the Specialty Services section.

REMAINDER OF ACTIVITY WEEKS

The remainder (20+ weeks) of the resident's training not specified above is left up to the discretion of the Program Director and Resident Advisor. The resident may spend additional time on clinics, specialty service rotations, CE, vacation, or other non-surgical training.

Surgery weeks beyond the required minimum should be classified in the Resident Training Log as "Surgical Rotation Supervised by an ACVS Diplomate," "Surgical Rotations Supervised by an ECVS Diplomate," or "Surgical Rotation Supervised by a non-Diplomate".

The following types of activity should be classified in the log using the "CE/Vacation/Other" week designation.

- Graduate degree studies

- National or international level continuing education courses
- Non-surgical veterinary rotation with the approval of the Resident Advisor
- Rotation at a human medical hospital
- Examination preparation time
- Vacation

ELECTIVE SURGERIES DURING NON-SURGICAL ACTIVITY WEEKS

Non-surgical activity weeks (Specialty Service Training, Research, Manuscript Preparation, CE/Vacation/Other, Independent Study, etc.) are prescribed to ensure that residents have sufficient time during the residency to fulfill non-surgical training requirements. The **expectation is that residents will not be assigned nor perform surgery clinic duties during non-surgical activity weeks**. Ideally, programs would schedule resident emergency duty such that it does not fall on these weeks, as well. Residents are required to log all cases. If surgical cases are performed by the resident during a non-surgical activity week the RCC reviewers will decline the week if it exceeds the following criteria:

- Non-surgical weeks with elective procedures performed will be declined.
- Specialty service weeks will be declined unless performed procedures are “curriculum required” [shortfall cases] or “emergency” procedures. Performance of routine cases will cause declination of the specialty service week. Additionally, residents attending a specialty service will not follow cases they consulted on to the OR when they are referred to the surgical service.
- Emergency surgeries, curriculum essential surgeries, and surgeries performed on “weekends” will not be cause for declination of weeks.

Additionally, programs that appear consistently to schedule residents for time on clinics during weeks recorded in the logs as off-clinic activities may be sanctioned ([Program Probation and Suspension](#)).

EMERGENCY DUTY

The resident must perform emergency surgery and manage emergency surgical cases.

SURGERY CASES

- A. A minimum of 400 surgical procedures will be required in the [Small Animal Curriculum](#) and 300 procedures in the [Large Animal–Equine Emphasis](#) and [Large Animal–General](#) Curricula. Each of these curricula is subdivided into Core Curriculum Categories. Residents must perform a minimum number of procedures within each of these categories. These procedures are tracked using the Cases section of the Resident Training Log. *Cases will only count toward core requirements if they are species appropriate.*
1. Only one procedure per patient per anesthetic episode may be used in fulfillment of the Core Curriculum; multiple procedures performed on the same patient during the same anesthetic period may NOT be entered into multiple Core Curriculum categories. Animals undergoing bilateral procedures may be counted only once per anesthetic episode in the Surgery Case Log.
 2. Research surgeries can be counted toward core curriculum requirements only if the surgical procedure performed was for treatment of spontaneously occurring disease.

3. No more than two residents may log a single surgical case during a single anesthetic episode. **The number of residents scrubbed in on each case will be recorded in the surgery log.**
4. **All surgical cases must be recorded in the Resident Training Log** except diagnostic work-ups without surgery. In addition, non-operative, interventional imaging, or minor procedures should not be included in the case log. Such procedures include:

- Closed reduction of coxofemoral luxation
- Cast changes/application/removal
- Diagnostic endoscopy
- Drain abscess
- Chest tube placement
- Feline DDF tenectomy
- Simple implant removal (e.g., transphyseal bridge removal—equine)
- TPLO plate removal
- Screw removal
- Changing dental packing
- Routine dental extraction
- PEG tube placement (endoscopic)
- External fixator removal
- Incisional biopsy
- Aural hematoma drainage
- Mass removal*
- Dental prophylaxis
- IV antibiotic or distal limb perfusion
- Arthrocentesis
- Joint/tendon sheath lavage
- Flushes
- Intraosseous infusion
- Rectal prolapse reduction (unless surgical)
- Floating teeth
- Intratracheal stent placement
- Peripheral lymph node excision
- Bone graft collection
- Fat collection for stem cells (unless MIS)
- Recurring wound care/wound management procedures, e.g. serial debridement
- Caslick procedure—Large animal
- Primary closure castration/scrotal ablation—Large animal
- Routine castration—Large animal
- Granulation tissue debridement —Large animal
- Percutaneous placement of antimicrobial beads
- Sinus trephination – Large animal
- Castration—Small animal
- Elective ovariohysterectomy—Small animal
- Declaw (Onychectomy)—Small animal
- Scrotal ablation—Small animal
- Episioplasty—Small animal
- Open ovariectomy – Small animal
- Pleuroport or vascular access port – Small animal
- Intravascular portosystem shunt occlusion

*Mass removal and wound repair procedures should reflect training that is at a higher level than what a general practitioner would perform.

- Small animal: Only reconstructive procedures should be logged
- Large animal: Refer to the *Mass Removal & Wound Procedure Guidelines* document available at www.acvs.org/residents/resource-documents.

UPDATED: Mass removal and wound repair policies.

- B. ACVS recommends that first-year residents perform at least 50% of their procedures with a Diplomate at the operating table.
- C. The resident should progress from heavy direct supervision in year 1 to being the primary surgeon as often as is deemed appropriate by the end of their residency program. The **primary surgeon** is defined as: the

individual having primary responsibility for the particular case, including preoperative planning, client communication, performance of the majority of the surgical procedure, and postoperative management of the surgical case. The role of primary surgeon should be documented for each case, when performed, in the Resident Training Log.

- D. At least 50% of each Core Curriculum Category must be directly supervised by a Diplomate of the ACVS or, when appropriate, by a Diplomate of ACVIM (Neurology), a Diplomate of ACVO or a Diplomate of AVDC. For surgical cases to be considered “**directly supervised**”, the Supervising or Supporting ACVS Diplomate must be present in the operating room and engaged in the procedure (whether scrubbed or not) for at least 25% of the procedure; and the ACVS Diplomate must contribute substantially to the decision making required for the case. Direct supervision must be noted for each case in the Resident Training Log. Specific case number requirements can be found in [Large Animal–Equine Emphasis](#), [Large Animal–General](#), and [Small Animal](#) curricula.

If an ECVS Diplomate serves as faculty/staff at a residency training program, **cases supervised by the ECVS Diplomate will count as directly supervised only when they occur during a week supervised by that ECVS Diplomate** and meet the requirements for direct supervision as noted above.

NEW: Limitation on cases directly supervised by an ECVS Diplomate.

EXTERNAL SURGICAL ROTATIONS

Residency training programs may incorporate external surgical rotations to provide additional training for the residents. External surgical rotations are those in which the resident and the Supervising ACVS Diplomate do not share a common workspace, but have regular and significant direct communication. External surgical rotations may be utilized to expose residents to unique experiences or to techniques that are not available at the primary institution (such as different surgical techniques, unique instrumentation). Specialty service rotations (Anesthesia, Diagnostic Imaging, etc.) are not included as part of the time allotted for external surgical rotations.

- A. External surgical rotations should comprise no more than 10% of a resident’s surgical weeks. Programs that anticipate more than 10% (11 weeks) of surgical training to occur at an ancillary site should apply for registration with ACVS as a [Collaborative Residency Training Program](#).
- B. If a resident fulfills part of their surgical requirements in a different institution from their primary institution/hospital, an [External Surgical Rotation Form](#) must be submitted by the resident. In the case of collaborative programs, this form should be completed for any cases or rotations that occur outside of the two or three institutions that are registered as part of the collaboration.
1. This form is to be submitted with the [Credentials Application](#) as part of the residency documentation.
 2. A case/rotation supervisor must be identified by the practice/institution where the external rotation takes place. *This case supervisor must verify that the resident performed the surgery by signing the External Surgical Rotation Form for each case which the resident scrubs on during the external surgical rotation.* The case/rotation supervisor may also be the person named as [directly supervising the surgery](#).
 3. The form must also be signed by both the resident and Resident Advisor.
 4. The resident must also include all of these cases in their online log **noting the location for cases not performed at the primary residency site(s)**.

5. If a resident performs surgery at multiple external sites, a separate form must be submitted for each location.
- C. Selection of appropriate external surgical rotations for the resident is ultimately the responsibility of the Program Director and Resident Advisors.

The External Surgical Rotation Form can be downloaded in Excel file format from the ACVS website: www.acvs.org/residents/forms.

RESEARCH

The resident must complete an investigative project that uses the scientific method. It is recommended that this project be initiated in Year 1 of the residency. This research may lead to the publication used by the resident to meet the [Publication Requirement](#).

Residents must spend at least 18 weeks of their residency in pursuit of the research project or in scientific manuscript preparation. These weeks are tracked in the Resident Training Log using the “Research/Manuscript” classification. Residents should not be scheduled on clinics during these weeks ([Weeks of Training in Non-Surgical Pursuits](#)).

SEMINARS

The resident must present a **minimum of 6 distinctly different seminars** during the residency. The purpose of the seminar requirement is twofold: 1) to provide the resident exposure to a broad variety of surgically related subjects, and 2) to allow the resident to gain experience giving a formal presentation followed by a discussion period in a public forum. Seminars may not include multiple presentations of the same topic or lecture. The title should accurately reflect the contents of the seminar. These seminars must be documented in the Resident Training Log. Once the resident has 6 seminars on distinctly different topics *approved by the Resident Credentialing Committee*, new seminars do not have to be documented in the Resident Training Log.

Definition of Seminar: An oral scientific presentation that is followed by a discussion period in a public forum.

- A. Program Directors need to be sure that their residents do in-depth presentations to peer audiences.
- B. An ACVS Diplomate must be present at seminars and actively participate in discussions.
- C. Lectures to students that are supervised, attended and critiqued by faculty who are ACVS Diplomates can be counted toward this requirement.
- D. Unsupervised lectures, case rounds presentations/case reports, presentations to audiences consisting solely of veterinary students, or reviews of single journal articles **will not count** towards this requirement.

SURGERY RESIDENTS’ ROUNDS PRESENTATIONS

Required Attendance: During surgical service rotations, the resident is required to attend surgery residents’ conferences and surgery ward rounds.

The resident must regularly present cases at surgery residents' rounds. The Resident Advisor must attest to the resident's attendance at rounds on a weekly or bi-weekly (every two weeks) basis.

EDUCATIONAL EVENTS

The resident is required to attend educational events beyond daily case management discussions (rounds) and seminar presentations such as **journal or textbook reviews, morbidity/mortality rounds, and formal case presentations** among residents and Diplomates. *These educational events must occur at least once every two weeks throughout the residency training period.* Educational events are tracked in the Resident Training Log system.

Educational events can only be counted in the residents' logs if an ACVS Diplomate was present and actively participating in discussions. Verification by the Resident Advisor will confirm that a Diplomate was present and engaged at the educational events.

Examination Preparation. Residents who have completed the appropriate requirements will be eligible to take the [Phase I Surgical Knowledge examination](#) during the second year of the residency. Program Directors and Resident Advisors are encouraged to incorporate the suggested reading into the training of the resident during the first year and a half of the residency and to allow residents to take the examination if eligible.

CONFERENCES

The following conferences are recommended for attendance:

- Veterinary specialty oriented conferences (e.g., ACVS Surgery Summit, ophthalmology, neurology, internal medicine)
- Other scientific presentations, including human medical conferences

CLINICAL TEACHING

The resident is encouraged to participate in the clinical education of graduate veterinarians, primary care veterinarians, veterinary medical students assigned to the surgical service rotations, staff, and/or interns, as applicable.

SPECIALTY SERVICE ROTATIONS

Residents are required to complete specialty service rotations in anesthesia, diagnostic imaging, internal medicine/critical care, and pathology supervised by allied specialty Diplomates. These specialty service rotations may occur at the primary training site or another site as approved by the Resident Advisor.

Objectives have been established for each of the specialty service rotations to promote appropriate training. Each rotation has both required and recommended objectives. **These objectives should be shared with the allied specialty Diplomates who supervise the resident during the required specialty rotations.** It is anticipated that many of these objectives might be completed by the end of the residency. Completion of these rotations is documented in the Resident Training Log in the Specialty Services section. The allied specialist will indicate if the

surgery resident successfully completed the required rotation and which of the required and recommended elements were completed. Specialty service rotations recorded as Activity Weeks in the Resident Training Log will use the “Other Specialty Training” designation.

Residents should not be assigned nor perform surgery clinic duties during [non-surgical activity weeks](#).

ANESTHESIA

- Two weeks: One week must be a full, continuous week of training; the second week may be completed as a full, continuous week of training or as 40 cumulative hours.
- Must be supervised by a Diplomate of the American College of Veterinary Anesthesia and Analgesia (ACVAA).
- [Small animal](#) and [large animal](#) residents have to successfully induce, maintain, and recover a minimum number of patients at certain ASA levels. These cases are recorded in the log in the Specialty Services section and require approval of the ACVAA Diplomate supervisor.

DIAGNOSTIC IMAGING

- Two weeks: One week must be a full, continuous week of training; the second week may be completed as a full, continuous week of training or as 40 cumulative hours.
- Must be supervised by a Diplomate of the American College of Veterinary Radiology.

INTERNAL MEDICINE OR CRITICAL CARE

- Small Animal = three weeks
- Large Animal = two weeks
- The rotation may be spent exclusively on internal medicine (general or subspecialty*), exclusively on critical care, or as a mixture of the two specialties.
- Must be completed as full, continuous weeks of training. Weeks do not have to be consecutive.
- Must be supervised by a Diplomate of the American College of Veterinary Internal Medicine (ACVIM) or a Diplomate of the American College of Veterinary Emergency and Critical Care (ACVECC).

*[Neurosurgery rotations](#) supervised by an ACVIM (Neurology) Diplomate are considered Surgical Rotations Supervised by an ACVS Diplomate and do not fulfill this requirement.

CLINICAL AND ANATOMIC PATHOLOGY

- Two weeks or 80 hours divided between clinical and anatomic pathology
 - Clinical pathology: one week or 40 hours
 - Anatomic pathology: one week or 40 hours
- May be completed as full, continuous weeks of training or on an hourly or weekly basis.
- Must be supervised by a Diplomate of the American College of Veterinary Pathologists (ACVP).
- Residents must participate in all stages of management for a minimum number of anatomic pathology cases. These cases are recorded in the log in the Specialty Services section and require approval of the ACVP Diplomate supervisor.

Note: If Pathology and/or Diagnostic Imaging training is undertaken on an hourly basis (i.e., in evenings or in rounds during other clinical duty), rather than as entire weeks, the resident will have up to [3 activity weeks](#) [“open”](#) for the program to use as they see fit.

GUIDELINES AND OBJECTIVES

The primary objective of the Anesthesia Specialty Service Rotation is to ensure the surgery resident has sufficient exposure to and appreciation of the principles of anesthesia, the technical requirements necessary to perform anesthesia, an understanding of the monitoring equipment used in the application of anesthesia, and the ability to interpret information obtained from that equipment. The resident should work closely with the anesthesiologist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. At the conclusion of the rotation the anesthesiologist should be confident that the surgery resident has sufficient knowledge and the basic skills to supervise anesthesia, and that the resident can consult with an anesthesiologist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident of a minimum of 2 weeks with the anesthesia service working toward the outlined objectives to be supervised by an ACVAA Diplomate. At least one week of the training must be scheduled as a one-week block of time; the remainder can be either a one-week block or 40 cumulative hours of interactions over the course of the residency.

Objective #2: The resident should successfully induce, maintain, and recover a minimum of seven (7) patients in ASA class 2 or higher, including at least two (2) patients in ASA class 3 or higher. Discussion of cases should demonstrate and convey an understanding of medical and physiologic requirements as related to anesthetic management. These cases must be supervised by an ACVAA Diplomate. They may be completed at any time during the residency.

RECOMMENDED

Objective #3: Understand the use and mechanism of action of common anesthetic drugs. Answer accurately basic questions regarding various classes of drugs including premedicants, anesthetic induction and maintenance agents, local anesthetics, neuromuscular blocking agents, analgesics, inotropes and pressors, anticholinergics, sedatives, reversal agents, and antiarrhythmic drugs.

Objective #4: Demonstrate competency in placing an intravenous catheter, and discuss and describe four different sites for catheter placement.

Objective #5: Demonstrate the ability to successfully intubate a dog and cat without iatrogenic trauma. Through discussion or practice demonstrate ability to place a pharyngostomy tube.

Objective #6: Accurately assess anesthetic depth for each anesthetic agent used. Describe criteria and demonstrate ability to assess anesthetic depth for at least two anesthetic agents.

Objective #7: Accurately assess information obtained from an arterial catheter. Demonstrate ability to correctly connect/assemble the pressure transducer. Demonstrate ability to interpret data obtained from an arterial catheter and recommend an intervention plan.

Objective #8: Perform an epidural injection. Demonstrate landmarks used and technically complete an epidural injection.

Objective #9: Demonstrate an understanding of the utility of assisted ventilation and placement of an animal on an anesthetic ventilator. Demonstrate understanding of the basic components of an anesthetic ventilator through discussion and successfully placing a patient on a ventilator.

Objective #10: Demonstrate an understanding of respiratory physiology, including ventilation and gas exchange. Define minimal alveolar concentration and relationship to anesthetic requirements and discuss and interpret blood gas data.

Objective #11: Demonstrate an understanding of physiologic alterations. Identify causes, consequences, and treatment for common conditions including, but not limited to, hypothermia and hypertension.

Objective #12: Demonstrate basic understanding of an anesthesia machine. Identify a system as a breathing or non-rebreathing system, and identify basic components of the system and their role, including scavenging of anesthetic gases.

Objective #13: Demonstrate basic understanding of the principles of use, information provided, and interpretation of data obtained from monitoring equipment. Demonstrate understanding of the nature of the information obtained and interpret data (including graphs) from monitoring equipment including, but not limited to, (1) capnography, (2) pulse oximetry, (3) inhalant agent monitors, (4) blood pressure, and (5) electrocardiography. Understanding must be sufficient to allow management and prevention of crisis.

Objective #14: Demonstrate an understanding of fluid support, including fluid type and rate (includes an appreciation of the utility of continuous rate infusion compared to the bolus administration of drugs). Successfully develop and implement a fluid plan for patients (includes the ability to develop a plan demonstrating alternatives for CRI or bolus drug administration).

Objective #15: Demonstrate the ability to produce an anesthetic record and maintain a drug log, including legible entry and appropriate temporal entry of data into the anesthetic log.

Objective #16: Demonstrate understanding the physiology of pain and need for analgesia during recovery from surgery and general anesthesia. Discuss and formulate a postoperative recovery plan including anticipated need for analgesia, options for providing analgesia, and write orders to identify items to be assessed during the recovery period. The resident should demonstrate the ability to make and interpret appropriate observations during the recovery period, and have sufficient understanding of pain and analgesic agents to meet patient needs.

RECOMMENDED GUIDELINES AND OBJECTIVES

The primary objective of the Anesthesia Specialty Service Rotation is to ensure the surgery resident has sufficient exposure to and appreciation of the principles of anesthesia, the technical requirements necessary to perform anesthesia, an understanding of the monitoring equipment used in the application of anesthesia, and the ability to interpret information obtained from that equipment. The resident should work closely with the anesthesiologist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. At the conclusion of the rotation the anesthesiologist should be confident that the surgery resident has sufficient knowledge and the basic skills to supervise anesthesia, and that the resident can consult with an anesthesiologist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident of a minimum of 2 weeks with the Anesthesia Service working towards the outlined objectives to be supervised by an ACVAA Diplomate. At least one week of the training must be scheduled as a one-week block of time; the remainder can be either a one-week block or 40 cumulative hours of interactions over the course of the residency.

Objective #2: Anesthetize equine and / or large animal patients to demonstrate understanding of normal protocols of anesthesia. Achieve successful induction, maintenance, and recovery of a minimum of five patients (preferably of 2 different species) in ASA class 2 or higher, and at least two patients ASA class 3 or higher. These cases must be supervised by an ACVAA Diplomate. They may be completed at any time during the residency.

RECOMMENDED

Objective #3: Understand the use and mechanism of action of common anesthetic drugs. Answer accurately basic questions regarding various classes of drugs including premedicants, anesthetic induction and maintenance agents, local anesthetics, neuromuscular blocking agents, analgesics, inotropes and pressors, anticholinergics, sedatives, reversal agents, and antiarrhythmic drugs.

Objective #4: Demonstrate competency in placing an intravenous catheter, and discuss and describe three different sites for catheter placement.

Objective #5: Demonstrate the ability to successfully intubate a horse and / or large animal without iatrogenic trauma. Understand the different intubations techniques for different large animal species.

Objective #6: Assess anesthetic depth for each anesthetic agent used: gas inhalation and intravenous drip anesthesia (i.e., GKX). Describe criteria and assess anesthetic depth for at least one anesthetic agent and one intravenous drip anesthesia protocol (i.e., GKX).

Objective #7: Place and assess information obtained from an arterial catheter. Place an arterial catheter, know 3 locations available for arterial catheter placement, and correctly connect/assemble the pressure transducer. Demonstrate ability to interpret data obtained from an arterial catheter, know the critical minimal blood pressure levels and recommend an intervention plan.

Objective #8: Demonstrate an understanding of the utility of assisted ventilation and placement of an animal on an anesthetic ventilator. Demonstrate an understanding of the basic components of an anesthetic ventilator through discussion and successfully placing a patient on a ventilator.

Objective #9: Demonstrate an understanding of respiratory physiology, including ventilation and gas exchange. Define minimal alveolar concentration and relationship to anesthetic requirements, and discuss and interpret blood gas data.

Objective #10: Demonstrate an understanding of physiologic alterations. Identify causes, consequences, and treatment for common conditions including, but not limited to bradycardia and hypotension.

Objective #11: Demonstrate basic understanding of an anesthesia machine. Identify a system as a breathing or non-rebreathing system, and identify basic components of the system and their role, including scavenging of anesthetic gases.

Objective #12: Demonstrate basic understanding of the principles of use, information provided, and interpretation of data obtained from monitoring equipment. Demonstrate understanding of the nature of the information obtained and interpret data (including graphs) from monitoring equipment including, but not limited to, (1) capnography, (2) inhalant agent monitors, (3) blood pressure, and (4) electrocardiography. Understanding must be sufficient to allow management and prevention of crisis.

Objective #13: Demonstrate an understanding of fluid support, including fluid type and rate. Have an appreciation of the utility of continuous rate infusion compared to the bolus administration of drugs. Successfully develop and implement a fluid plan for patients, including the ability to develop a plan demonstrating alternatives for CRI or bolus drug administration.

Objective #14: Demonstrate an understanding of anesthetic recovery techniques for equine and large animals. Successfully make an anesthetic recovery plan for horses and large animals taking into consideration the following concerns: (1) orthopedic injury recovery, (2) prevention of aspiration pneumonia in large animals, (3) prevention of tying up in horses.

Objective #15: Demonstrate ability to produce an anesthetic record and maintain a drug log, including legible entry and appropriate temporal entry of data into the anesthetic log.

DIAGNOSTIC IMAGING SPECIALTY SERVICE ROTATION—SMALL ANIMAL SURGERY RESIDENTS

GUIDELINES AND OBJECTIVES

The primary objective of the two week (80 hour) diagnostic imaging specialty service rotation is to ensure the surgery resident has sufficient exposure to and appreciation of the principles of diagnostic imaging, the technical requirements necessary to perform diagnostic imaging, an understanding of the equipment used during diagnostic imaging, and the ability to interpret information obtained from that equipment. The resident should work closely with the radiologist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. The resident should be familiar with the processes required to obtain and review standard radiographic projections and cross-sectional images as they pertain to the skeletal, soft tissue and neurologic systems of small animal patients. At the conclusion of the training period the radiologist should be confident that the surgery resident has sufficient knowledge and the basic skills in diagnostic imaging, and that the resident can consult with a radiologist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident with the Diagnostic Imaging Service toward the outlined objectives for a minimum of 2 weeks under the supervision of an ACVR Diplomate. At least one week of the training must be scheduled as a one-week block of time; the remainder can be either a one-week block or 40 cumulative hours of interactions over the course of the residency.

RECOMMENDED

Objective #2: Demonstrate an understanding of the normal and pathologic radiographic anatomy of the axial and appendicular skeleton. Differentiate normal and abnormal radiographic anatomy of the skeleton in dogs and cats.

Objective #3: Demonstrate an understanding of the normal and pathologic radiographic anatomy of the thorax to include the heart, pericardium, ribs, lungs, and pleural space. Differentiate normal and abnormal radiographic anatomy for the thoracic cavity in dogs and cats.

Objective #4: Demonstrate an understanding of the normal and pathologic radiographic anatomy of the abdomen to include peritoneal effusions, masses, intestinal gas patterns, organomegaly and normal abdominal organ position. Differentiate normal and abnormal anatomy of the abdominal cavity in dogs and cats.

Objective #5: Demonstrate an understanding of image acquisition to include proper patient positioning, understanding machine settings, evaluating initial images for proper position and technique and troubleshooting common causes of poor images. Properly position canine and feline patients and obtain diagnostic quality radiographs of the skeleton, abdominal cavity and thoracic cavity.

Objective #6: Demonstrate an understanding of common contrast studies used in small animal general radiology, including, but not limited to the following: contrast gastrointestinal imaging to include swallowing, the esophagus, stomach, small intestine, large intestine and contrast portography; contrast imaging of the genitourinary system to include intravenous urography, cystography, urethrography and any associated pathologic conditions related to

the reproductive tract; and contrast studies of the axial spine to include myelography. Obtain diagnostic quality contrast studies in dogs and cats.

Objective #7: Through the use of study case files, gain an understanding and perspective of how different imaging modalities and procedures positively or negatively impact the resolution of clinical cases. Determine the most appropriate diagnostic imaging modalities for use in commonly seen clinical cases.

Objective #8: Participate in daily/weekly radiology rounds to include presentation of cases to students, interns and the radiology faculty. Be familiar with methods for appropriate radiographic case presentation.

Objective #9: Demonstrate an understanding of cross sectional imaging modalities such as CT, MRI and Ultrasound and how these modalities supplement/supplant general radiographic techniques. Recognize and properly orient MRI and CT images, be familiar with cross sectional anatomy, and recognize common abnormalities.

Objective #10: Demonstrate an understanding of emerging imaging modalities such as nuclear scintigraphy and PET/CT through either direct involvement with the modalities or literature review pertaining to small animal diagnostics. Demonstrate an understanding of the uses for scintigraphy, PET scans, and other emerging imaging modalities.

DIAGNOSTIC IMAGING SPECIALTY SERVICE ROTATION—LARGE ANIMAL SURGERY RESIDENTS

GUIDELINES AND OBJECTIVES

The primary objective of the two week (80 hour) diagnostic imaging specialty service rotation is to ensure the surgery resident has sufficient exposure to and appreciation of the principles of diagnostic imaging, the technical requirements necessary to perform diagnostic imaging, an understanding of the equipment used during diagnostic imaging, and the ability to interpret information obtained from that equipment. The resident should work closely with the radiologist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. The resident should be familiar with the processes required to obtain and review standard radiographic projections and ultrasound images as they pertain to the large animal patient. At the conclusion of the training period the radiologist should be confident that the surgery resident has sufficient knowledge and the basic skills in diagnostic imaging, and that the resident can consult with a radiologist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident with the Diagnostic Imaging Service toward the outlined objectives for a minimum of 2 weeks under the supervision of an ACVR Diplomate. At least one week of the training must be scheduled as a one-week block of time; the remainder can be either a one-week block or 40 cumulative hours of interactions over the course of the residency).

RECOMMENDED

Objective #2: Understand normal and pathologic anatomy. Demonstrate an understanding of the normal and pathologic radiographic and ultrasonographic anatomy of the appendicular skeletal system and the relevant axial skeleton (head, abdomen, and thorax).

Objective #3: Understand basic image acquisition for radiographs and ultrasound. Demonstrate the ability to understand the image acquisition techniques of the various radiographic techniques available (digital, computed and film screen radiography) as well as ultrasound. Understand the basic machine settings for radiographic and ultrasonographic image acquisition, proper imaging technique, proper positioning, and understand the common causes of poor images and the basic principles for troubleshooting.

Objective #4: Understand how to obtain special, non-traditional views. Demonstrate the ability to obtain special, non-traditional views that are required for certain injuries, such as various skyline views, or non-weight-bearing ultrasonographic images.

Objective #5: Develop ability to interpret radiographic and ultrasonographic images. Using clinical cases that present to the radiology service as well as case files, identify abnormal findings, distinguish artifacts, give an appropriate radiographic description of the changes present, provide a diagnosis and present what further imaging or diagnostics may be beneficial to improve/obtain a diagnosis.

Objective #6: Choose and perform additional diagnostic studies related to imaging. Demonstrate an understanding of how a basic radiographic or ultrasonographic image may be enhanced to obtain a diagnosis. This

includes use of probes, or other metallic objects inserted in or on the patient, contrast studies, fluoroscopy, or use of stand-off pads.

Objective #7: Gain exposure to advanced imaging techniques. Have a foundational knowledge of nuclear scintigraphy, computed tomography (CT), and magnetic resonance imaging (MRI) as noted in the large animal literature; hands-on experience is not necessary for the completion of the diagnostic imaging special rotation. Exposure can be on a case-by-case basis or as an instructional module if one has been developed by the supporting institution. It is important to know the basics as to how these images are acquired, how they supplement general radiology and ultrasound, when to utilize them and which patients are not good candidates for advanced imaging, and how to interpret images obtained using these advanced imaging techniques.

INTERNAL MEDICINE/CRITICAL CARE SPECIALTY SERVICE ROTATION—SMALL ANIMAL SURGERY RESIDENTS

GUIDELINES AND OBJECTIVES

The primary objective of the internal medicine/critical care specialty service rotation is to ensure the surgery resident has sufficient exposure to and appreciation of non-surgical case management, an understanding of diagnostic tests, the ability to interpret information obtained from diagnostic tests and patient monitoring, and exposure to emergency procedures. The resident should work closely with the internist/criticalist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. It is recognized that the 120-hour period may not allow assessment of each area identified below. However, case interaction and rounds discussion should be sufficient so that, at the conclusion of the rotation, the internist/criticalist is confident that the surgery resident has sufficient knowledge and the basic skills to manage these types of cases, and that they (the resident) can consult with an internist or criticalist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident with the Internal Medicine or Critical Care service toward achievement of the outlined objectives for a minimum of 3 weeks completed in week-long blocks of time. The resident must be supervised by a Diplomate of the ACVIM (general or subspecialty) or a Diplomate of the ACVECC.

RECOMMENDED

Objective #2: Demonstrate skills related to general patient management. Generate (1) a problem list, (2) a differential diagnoses list, and (3) pre- and postoperative plans based on the abnormal condition and anticipated or concurrent problems.

Objective #3: Demonstrate adequate record keeping. Satisfactorily (1) complete a patient history form, (2) maintain a treatment sheet including monitoring parameters and therapies, and (3) maintain a communication log.

Objective #4: Patient triage: Appropriately prioritize the patient's abnormalities.

Objective #5: Physical examination: Identify a patient in shock, quantify or estimate degree of dehydration, identify abnormalities of respiration through respiratory pattern recognition and auscultation findings (examples include pneumothorax, pleural fluid, pulmonary parenchymal disease, and upper airway obstruction, and identify cardiac murmurs and arrhythmias on auscultation.

Objective #6: Supervise diagnostic tests: Demonstrate an understanding of common laboratory tests, including being able to successfully interpret blood gas data. Understanding of common laboratory tests includes technical skills required to obtain sample, interpretation of information obtained from diagnostic tests, and ability to use information appropriately in decision making processes.

Objective #7: Develop basic cytology skills: When appropriate and available, utilize the expertise of board-certified clinical pathologists. On an emergency basis such expertise may not be available, yet decisions regarding case management must be made in a timely fashion. Under such emergency circumstances, obtain the appropriate

sample, prepare a slide, and evaluate a preparation to characterize a sample as normal, inflammatory, neoplastic, or septic.

Objective #8: Demonstrate understanding of appropriate fluid therapy: Successfully develop and implement a fluid plan for patients (includes recognition and treatment of electrolyte abnormalities and transfusion medicine and coagulation testing).

Objective #9: Diagnosis and treatment of shock: Identify and classify shock, recognize causes and associated disturbances, and develop a resuscitation plan.

Objective #10: Demonstrate understanding of and rational decision making for drug therapy. Drug classes include (1) antimicrobials, (2) analgesics, (3) antiarrhythmics, and (4) pressors and inotropes. Demonstrate an understanding of the indications for, methods of administration of, and advantages and disadvantages of commonly used drugs.

Objective #11: Exposure to and ability to perform various practical techniques: Demonstrate understanding of the following procedures:

- Placement of peripheral catheters and a multi-lumen intravenous catheter using the guide wire (modified Seldinger technique)
- Placing urinary catheters
- Percutaneous chest tube placement
- Emergency tracheotomy/tracheostomy
- Placement of nasal oxygen catheter/implement nasal oxygen therapy
- Basic ultrasonography to determine if abdominal/thoracic/pericardial fluid is present.
- If fluid is present, perform centesis to sample/remove fluid.
- Provide enteral and parenteral nutrition
- Obtain an arterial blood sample for blood gas analysis

Objective #12: Exposure to and ability to utilize various monitoring techniques: Demonstrate understanding of the following procedures:

- Techniques for monitoring and treatment of a complex critical case including physical examination, blood pressure monitoring, central venous pressure, glucose and electrolyte monitoring, fluid therapy, and other aspects of day to day care
- Pulse oximetry
- Basic ECG evaluation
- Blood pressure determination
- Calculation and use of small pumps for infusion of drugs or feeding
- Diagnostic tests – such as use of lactate in monitoring potentially septic patients

INTERNAL MEDICINE/CRITICAL CARE SPECIALTY SERVICE ROTATION—LARGE ANIMAL SURGERY RESIDENTS

GUIDELINES AND OBJECTIVES

The primary objective of the internal medicine/critical care specialty service rotation is to ensure the surgery resident has sufficient exposure to and appreciation of non-surgical case management, an understanding of diagnostic tests, the ability to interpret information obtained from diagnostic tests and patient monitoring, and exposure to emergency procedures. The resident should work closely with the internist/criticalist so that skills can be assessed through dialogue regarding case management, participation in clinical rounds, and application of technical skills. It is recognized that the 80-hour period may not allow assessment of each area identified below. However, case interaction and rounds discussion should be sufficient so that, at the conclusion of the rotation, the internist/criticalist is confident that the surgery resident has sufficient knowledge and the basic skills to manage these types of cases, and that they (the resident) can consult with an internist or criticalist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident with the Internal Medicine or Critical Care service toward the outlined objectives for a minimum of 2 weeks completed in week-long blocks of time. The resident must be supervised by a Diplomate of the ACVIM (general or subspecialty) or by a Diplomate of the ACVECC.

RECOMMENDED

Objective #2: Demonstrate skills related to general patient management. Demonstrate the ability to generate (1) a problem list, (2) a differential diagnoses list, and (3) pre- and postoperative plans based on the abnormal condition and anticipated or concurrent problems.

Objective #3: Adequate record keeping: Satisfactorily (1) complete a patient history form, (2) maintain a treatment sheet including monitoring parameters and therapies, and (3) maintain a communication log.

Objective #4: Patient triage: Appropriately prioritize the patient's abnormalities.

Objective #5: Physical examination: Identify a patient in shock, quantify or estimate degree of dehydration, identify abnormalities of upper and lower respiratory system, identify abnormalities of gastrointestinal system, identify abnormalities of urogenital system, identify and localize neurological abnormalities, identify cardiac murmurs and arrhythmias on auscultation, and perform a complete physical examination on a foal.

Objective #6: Choose and perform appropriate diagnostic tests. Demonstrate an understanding of and capability to perform common laboratory tests. In addition, understand when special diagnostics (e.g., trans-tracheal wash, BAL, CSF tap, thoracocentesis) are required for certain diseases.

Objective #7: Develop the ability to interpret diagnostic tests. Evaluate the results of diagnostic tests such as complete blood counts, chemistry evaluations, blood gases, and cytology preparations to help stabilize patients or make emergency decisions regarding further therapy.

Objective #8: Demonstrate understanding of appropriate fluid therapy. Successfully develop and implement a fluid plan for patients, including:

1. Recognition and treatment of electrolyte abnormalities
2. Colloidal support
3. Transfusion medicine and coagulation testing

Objective #9: Diagnosis and treatment of shock: Identify and classify shock, recognize causes and associated disturbances, and develop a resuscitation plan.

Objective #10: Demonstrate understanding of and rational decision making for drug therapy. Drug classes include (1) antimicrobials, (2) analgesics, (3) antiarrhythmics, and (4) pressors and inotropes. Demonstrate an understanding of the indications for, methods of administration, and advantages and disadvantages of commonly used drugs.

Objective #11: Exposure to and ability to perform various practical techniques: Demonstrate understanding of the following procedures:

- Placement of peripheral catheters and a multi-lumen intravenous catheter using the guide wire
- Placing urinary catheters
- Percutaneous chest tube placement
- Emergency tracheotomy/tracheostomy
- Implement nasal oxygen therapy
- Basic ultrasonography of the thoracic and abdominal cavities
- Perform esophagoscopy/gastroscopy
- Provide enteral and parenteral nutrition
- Obtain an arterial blood sample for blood gas analysis

Objective #12: Exposure to and ability to utilize various monitoring techniques: Demonstrate understanding of the following:

- Large animal infectious diseases and basic biosecurity
- Techniques for monitoring and treatment of a complex critical case including physical examination, electrolyte monitoring, fluid therapy, and other aspects of day to day care
- Pulse oximetry
- Basic ECG evaluation
- Blood pressure determination
- Calculation and use of small pumps for infusion of drugs or feeding
- Diagnostic tests such as use of lactate in monitoring potentially septic patients

CLINICAL AND ANATOMIC PATHOLOGY SPECIALTY SERVICE ROTATION—SURGERY RESIDENTS

GUIDELINES AND OBJECTIVES

The primary objective of the pathology specialty service rotation is to ensure the surgery resident has sufficient exposure to and appreciation of the principles of anatomic and clinical pathology, the technical requirements necessary to perform common procedures, an understanding of the equipment used in the application of pathology, and the ability to interpret information obtained from that equipment. The resident should work closely with the pathologist so that skills can be assessed through dialogue regarding case management, participation in rounds, and application of technical skills. At the conclusion of the rotation the pathologist should be confident that the surgery resident has sufficient knowledge and basic skills and that the resident can consult with a pathologist in an informed and intelligent manner.

REQUIRED

Objective #1: Satisfactory participation by the resident with the Anatomic Pathology service toward the outlined objectives for a minimum of one week (40 hours). The training consists of either a full, continuous week or 40 cumulative hours over the course of the residency, and must be supervised by an ACVP Diplomate.

Objective #2: Satisfactory participation by the resident with the Clinical Pathology service toward the outlined objectives for a minimum of one week (40 hours). The training consists of either a full, continuous week or on 40 cumulative hours over the course of the residency, and must be supervised by an ACVP Diplomate.

Objective #3: Gain practical experience in anatomic pathology by participating in all stages of management for 2 cases, including tissue collection, sectioning, and histopathologic interpretation. These cases can constitute biopsy collection from patients, or participation on necropsy cases and then following organ sample collection, preparation, and interpretation. These cases require approval of the ACVP Diplomate supervisor.

Clarification: Cases must have ACVP Diplomate approval.

RECOMMENDED

Objective #4: (Clinical and Anatomic) Know the proper sampling techniques and handling procedures for blood samples, fluid samples, and cytology samples (including fine needle aspirates and impression smears). Properly collect and handle fluid, cytology, and tissue samples for submission to a diagnostic pathology laboratory.

Objective #5: (Anatomic) Know the proper sampling techniques and handling procedures for tissue biopsies from all organs. Describe the appropriate sample size, handling and treatment of samples, and ideal sample location in relation to the lesion. Understand differences between frozen and fixed samples. Understand the various fixation agents available.

Objective #6: (Anatomic) Recognize the abilities and limitations of interpreting anatomical changes. Understand what can and cannot be expected from an anatomical analysis and understand how to maximize the interaction with pathologists, including how to provide an appropriate history, options of surgical margin sampling, etc.

Objective #7: (Clinical) Understand how to properly interpret data obtained from blood work, fluid, and cytology samples. Correctly recognize and interpret a CBC/Chem panel for an animal with severe inflammation (with and without sepsis), correctly recognize and interpret a CBC and coagulation profile for animals with DIC and other coagulation abnormalities, correctly recognize and interpret a CBC/Chem panel for animals with dysfunction of a major metabolic organ system (hepatic, renal, endocrine), and provide reasonable differential diagnoses for increased or decreased results on each parameter on a CBC. Also provide reasonable differential diagnoses for increased or decreased results on each parameter on a chemistry panel; interpret common changes on a UA as relating to sediment cytology, and changes in biochemical parameters; interpret common changes in blood gas analysis; interpret and categorize common body cavity effusions; and interpret synovial fluid analysis. Differentiate septic vs. non-septic inflammation on cytology, interpret cytological characteristics of inflammatory vs. neoplasia, and interpret the cytological characteristics for epithelial, mesenchymal and rounds cell neoplasias.

SEMI-ANNUAL EVALUATION OF THE RESIDENT

Residents must meet with their Resident Advisor at least twice a year for evaluation of performance and progress. Any concerns about the resident's performance should be accompanied by a plan by which the resident can improve their performance. This evaluation should also include a review of the resident's progress toward meeting minimum training requirements. The [Resident Advisor](#) must document this evaluation as part of the Semi-Annual Review section of the Resident Training Log. The [Program Director](#) must verify the contents of the Semi-Annual Review. Sample performance evaluation forms can be found on the website at www.acvs.org/residents/resource-documents.

Denied Training: At each Semi-Annual Review, the Resident Advisor and Program Director have the option to either approve or deny any portion of a resident's training *for the current evaluation period* as noted on the review form. The portion of training denied may range from a single case or week of training to the entire period of activity. The Resident Credentialing Committee strongly suggests that the resident be advised that their performance is inadequate prior to the rejection of any training.

The designation given by the Resident Advisor at the time of review is final: i.e., once training is approved or denied at the Semi-Annual Review, it cannot be changed at a subsequent time. In the case of a gross ethical violation by the resident, the Resident Advisor and Program Director may appeal to the Resident Credentialing Committee in order to deny previously approved elements of training.

- A. If a resident is deemed **minimally acceptable** and continues their training on probation the following steps need to be taken:
1. The Resident Advisor should note any denied training during completion of the Semi-Annual Review.
 2. The Program Director is responsible for notification to the ACVS office within 30 days of a resident being placed on probation. The Program Director should send a letter, fax, or email to the ACVS office that includes the reason and effective date of probation of the resident.
 3. A letter from the ACVS office will be mailed to the resident in question acknowledging the notification of their probationary status.
 4. The resident's log will be updated to reflect any training denied in the Semi-Annual Review.
 5. If at the subsequent review, the resident is deemed satisfactory, the Program Director is responsible for notification to the ACVS office within 30 days of the second review of the continuation of the resident in question at his/her institution. The ACVS office will mail a document to the resident acknowledging their continuation of the residency at the program.
 6. If at the subsequent review, the resident is deemed unsatisfactory, follow the steps outlined in [Discontinuation of a Resident's Training](#).
 7. All documentation relating to this matter must be included in the credentials application should the resident submit such an application at the completion of their residency.
- B. If a resident is deemed **unsatisfactory** and is fired from their program or **voluntarily discontinues** the program, follow the steps outlined in [Discontinuation of a Resident's Training](#).

TIME LIMITS

- All resident training requirements must be met within six (6) consecutive years of residency initiation.
- The Phase I examination must be passed by the end of this 6-year period.
- Residents must apply for credentials within five years of the completion of their residency. The applicant must meet all resident training requirements in effect at the start of the residency.
- Additionally, prospective candidates should be aware of the 5-year limit on the date of publication described under [Criteria for Acceptance of a Publication](#).

DOCUMENTATION OF TRAINING BY THE RESIDENT AND RESIDENT RESPONSIBILITIES

The resident is responsible for:

- A. Ensuring that the [Program Director's Statement](#) has been received by ACVS within 30 days of the start date of the residency or within 30 days of the start date at a new program location if a resident transfers. The resident should also verify that the information sent in the confirmation email from ACVS acknowledging receipt of the Program Director's Statement is accurate. *The resident should keep a copy of the Program Director's Statement.*
- B. Ensuring that the [matriculation fee](#) has been paid within 30 days of the start of the residency. If a resident transfers programs, the resident should ensure that the transfer fee has been paid within 30 days of the start at the new location. While the fee may be paid by either the residency training program or by the resident, **it is ultimately the resident's responsibility to ensure payment of the fee.**
- C. Ensuring that the [Statement of Compliance to ACVS Residency Training Standards and Requirements](#) is submitted to the ACVS office within 30 days of the start of the residency. *The resident should keep a copy of the Statement of Compliance.*
- D. Ensuring that the [Registration of Resident Advisor](#) has been sent to the ACVS office within the first calendar quarter of the start of the residency. Additionally, the resident should verify that the information sent in the confirmation email from ACVS acknowledging receipt of the Registration of Resident Advisor is accurate. *The resident should keep a copy of the Registration of Resident Advisor.*
- E. Completion of all [Resident Training Requirements](#) as defined in these standards, effective July 1, 2018–June 30, 2019.
- F. Documentation of completion of all requirements using the web-based [Resident Training Log](#): surgery cases, activity weeks, seminars, specialty service rotations and supervisor information. Items entered should be submitted for verification by the Resident Advisor or specialty service rotation supervisor. All training entries should be completed online prior to each semi-annual performance evaluation.
 1. **Training items are to be logged in intervals of the previous 6 months only.** In instances where cases, weeks or seminars have been inadvertently left out of the log and the resident wishes to add them at a future date, accompanying documentation must be provided to confirm the resident's involvement (i.e.,

anesthesia record, surgery report, etc. which state the resident's name as a participant in the case, or a letter from the Diplomate supervisor for verification of a seminar or Activity Week).

2. All training items must be ready for review by the Resident Credentialing Committee before February 1 and August 1 each year. This requires that items be entered by the resident, submitted for Resident Advisor verification and for Program Director approval before **February 1** or **August 1**; see [Sequence of Responsibilities](#). Please take these deadlines into consideration when completing your documentation.

A delay in this process could result in a delay of [Credentials Application](#) submission, [examination](#), and board certification.

- G. Review of any items that have been declined by either the Resident Advisor or the Resident Credentialing Committee (RCC). Items declined by the RCC should be reviewed with the Program Director and Resident Advisor. These items should be deleted from the online system or amended as indicated by the Resident Advisor or RCC reviewers and submitted for further evaluation.
- H. Review of the proposed [Phase I examination reading list](#) and studying the material during the first year and a half of the residency.
- I. Residents who have completed their training must complete a program evaluation survey regarding their training experience. Completion of the survey is mandatory, but survey responses will not impact the outcome of the Credentials Application.

RESIDENT TRAINING LOG SYSTEM

The Resident Training Log is the web-based residency documentation and evaluation program. The Program Director (PD), Resident Advisor (RA), resident, affiliated specialty Diplomates, and ACVS have responsibilities for documentation and verification of satisfactory training for each resident. It is strongly recommended that each participant in a residency program review the [Resident Training Requirements](#) to understand the log requirements.

All communication from the ACVS office regarding the Resident Training Log will come from residency@acvs.org. Please add this address to the list of safe senders in your email program.

The [Resident Credentialing Committee reviews logs two times per year](#). The first 6 months* of training must be submitted by the resident and verified by the Resident Advisor before **February 1**. The second six months must be submitted and verified before **August 1**. The Resident Training Log will prevent items from reaching the Resident Credentialing Committee for review if they have not been submitted and approved on time (as documented in items C-I below). **A delay in this process could result in a delay of Credentials Application submission, examination, and board certification.**

*Note: The Resident Credentialing Committee will review no more than 60 weeks of training in any given year.

Residents who have completed more than 8 weeks of training prior to the upcoming log review deadline (February 1 or August 1) must submit their training for review by that deadline following the process below.

SEQUENCE OF RESPONSIBILITIES

- A. Upon receipt of the Program Director’s Statement, Statement of Compliance and matriculation fee at the ACVS office, ACVS will add the resident to the Resident Training Log database. An email notification will be sent to the resident regarding receipt of the forms and fee; a copy of the email will be sent to the PD. A separate email will be sent to the resident with instructions and login information for the Resident Training Log.
- B. Upon receipt of the Registration of Resident Advisor, ACVS will add the RA to the resident’s profile. An email notification will be sent to the resident regarding receipt of this form; a copy of the email will be sent to the RA.
- C. The resident should begin entering [cases](#), [activity weeks](#), [seminars](#), [specialty service rotations](#) (including applicable anesthesiology and pathology cases), [educational events](#), and supervisors in the online log. The resident should submit all training items for verification by the RA once the advisor has been added to the online system. *Note: items in the “New” column have not been submitted for RA review.*
- D. The RA should verify or decline all items in the Resident Training Log that have been submitted by the resident and are in the “Awaiting RA Review” queue.
- E. The resident will receive email notification regarding changes to be made to any item declined by the RA. The resident should make all necessary changes and resubmit the item for RA review. Similarly, should the Resident Credentialing Committee (RCC) decline items later in the process, the resident should make changes as indicated and submit again.
- F. The allied specialty Diplomates will receive an email with instructions to review the Specialty Service training in the online logs. Reminders are sent every two weeks for training that has not yet been approved.
- G. The Resident Advisor will receive an email notification to review the Specialty Service training once the allied specialty Diplomate has completed their evaluation.
- H. After the first six months of the residency, the [RA should conduct a performance and progress evaluation](#). The RA should then complete a Semi-Annual Review in the Resident Training Log that reflects the results of the evaluation of the resident. This review should indicate the resident’s attendance at rounds and whether the resident is continuing in the program.
- I. The PD should approve or decline the Semi-Annual Review as completed by the RA.
- J. The resident will receive email notification that the Semi-Annual Review is complete and should acknowledge that he/she has seen the review. The resident must acknowledge in the log that he/she has seen the review. Acknowledgement does not indicate agreement with content of the review.
- K. **Following acknowledgement of the Semi-Annual Review by the resident**, all items (cases, activity weeks, seminars, specialty service rotations, and educational events) that have been verified by the RA and fall within the six-month period of the review will be placed in the “Awaiting Deadline” queue in the log system.
- L. A process is run by the log system after the February 1 and August 1 deadlines to ensure that only items in the “Awaiting Deadline” queue, which were submitted on time (all steps C-K) will be sent for RCC review for the

upcoming period. A waiver of these deadlines will be granted only in extreme circumstances and must receive approval from the Resident Credentialing Committee and the ACVS Board of Regents.

- M. Steps C-K should be repeated for each six-month period of the residency.
- N. Two members of the [RCC will review all training log items](#) that were successfully submitted by the deadline. Should the RCC decline an item (see item O), the resident will receive an email notification regarding the changes to be made to the item. All items approved by the RCC will appear in the “Approved” column of the Requirements Summary and will count toward successful completion of ACVS requirements. Committee reviews will be completed by May 1 for the February 1 deadline and by November 1 for the August 1 deadline.
- O. The resident will receive email notification of any items reviewed and declined by the RCC. Items that are declined must be corrected and resubmitted by the resident for the subsequent review period (e.g., an item which is declined during the February–May review period must be corrected and resubmitted by the resident and re-verified by the Resident Advisor for the August–October review period).
- P. At the end of the residency, the Program Director must indicate Program Completion in the Resident Training Log after all training has been verified by the RA and the final Semi-Annual Review has been verified by the RA and PD.

ACCESSING THE RESIDENT TRAINING LOG

- A. The Resident Training Log is located at <http://rtl.acvs.org>.
- B. Residents will be emailed their login information when they are added to the system (within 30 days of receipt of paperwork at ACVS).
- C. Program Directors, Resident Advisors, and RCC members should use their standard ACVS website login and password. If you are unsure of this information, click the “Forgot your user name or password?” link on the main page of the website.
- D. After login, residents will see the requirements summary page. Program Directors, Resident Advisors, and RCC reviewers will be taken to a list of all residents for whom they are responsible.
- E. All screens in the Resident Training Log have instructions links which explain the purpose of the screen as well as any actions that can be performed. Instructions vary depending on the particular role of the user. “Resident Logs Preparation Guidelines” can be downloaded in PDF format from the ACVS website: www.acvs.org/residents/resource-documents. Residents, Resident Advisors, and Program Directors should review these guidelines. Additionally, the [Frequently Asked Questions](#) on the website has useful information about the log process.
- F. Recently board certified veterinary surgeons can be counted as Diplomate supervisors in the log system beginning with the final date of the ACVS Certification Examination for the given year.
- G. Residents are required to list supervisors in the log system for weeks, cases, specialty service training, and seminars. All ACVS Diplomates have records in the Supervisors database, along with many of the allied specialists. *Residents should search for supervisors by last name.* If a new supervisor is added, an email address is required.

EVALUATION BY THE RESIDENT CREDENTIALING COMMITTEE

The Resident Credentialing Committee evaluates each resident's progress twice a year as documented in the Resident Training Log. Log review deadlines are August 1 and February 1. Committee evaluations will be complete no later than November 1 and May 1 for each review period.

The Resident Credentialing Committee will review no more than 60 new weeks of training at any review cycle. *Resubmitted weeks do not count against this "60-week" limit; all resubmitted weeks will be reviewed.* If more than 60 new activity weeks are submitted during a review cycle, RCC reviewers will review the first 60 activity weeks chronologically (oldest to newest). The remainder of the training will be reviewed by the committee during the subsequent review cycle.

The committee will communicate deficiencies to the Program Director, Resident Advisor, and resident. If there are deficiencies deemed to be significant to the Resident Credentialing Committee's ability to evaluate thoroughly a Resident's progress, the resident may be required to correct and resubmit training items. Additionally, the Resident Credentialing Committee may share concerns with the Residency Program Compliance Committee (PCC). The PCC monitors residency training program compliance and, if warranted, deficiencies could result in program probation or suspension.

DISCONTINUATION OF A RESIDENT'S TRAINING

If a resident is deemed unsatisfactory and is released from their residency or voluntarily discontinues training, the following steps need to be taken:

- A. The resident must finalize the Resident Training Log and submit for review.
- B. The Resident Advisor must approve all outstanding items and submit a final Semi-Annual Review, indicating any portions of the training which will not be counted toward training requirements.
- C. The Program Director must approve the final Semi-Annual Review.
- D. **The Program Director is responsible for notification to the ACVS office within 30 days** of a resident discontinuing a residency at his/her institution. This letter/document should include the reason and effective date of discontinuation of the training. If any part of the training does not count towards their residency training requirements (as noted in the final Semi-Annual Review by the Resident Advisor), this should be made clear in this document.
- E. A letter from the ACVS office will be mailed to the resident in question acknowledging the notification of discontinuation of the residency.
- F. The resident in question is responsible for notification to the ACVS office to indicate their intent to resume their residency training at another registered residency training program or to discontinue permanently their surgery residency training. If they resume their residency training at another program, all documentation relating to this matter must be included in the Credentials Application should the resident submit such an application at the completion of their residency.

- G. If the resident does not notify the ACVS office about their intent within 60 days of receiving the letter from the ACVS office, a second certified letter will be mailed to the resident by the ACVS office stating permanent discontinuation of their residency training.

TRANSFERRING TO A NEW RESIDENCY TRAINING PROGRAM

Residents who voluntarily leave a training program or whose employment at a training program is terminated may continue to pursue residency training. The resident must be accepted into another registered residency training program. Upon acceptance into the new program, the Program Director must file a new Program Director's Statement with ACVS and the resident is responsible for payment of the [transfer fee](#).

Training that has been documented in the Resident Training Log system, verified by the Resident Advisor and Program Director at the previous program, and submitted for review by the Resident Credentialing Committee will continue to count toward minimum Resident Training Requirements as long as all training requirements are completed within 6 years of the original residency start date.

RESIDENCY QUESTIONS OR CONCERNS

Any resident who has a concern with his/her residency should discuss the question or concern with his/her Program Director or appropriate local institutional official. If the question or concern cannot be satisfactorily addressed at the local level and the resident believes the ACVS can be of assistance, the resident can contact the [ACVS Resident Training and Technology Manager](#), the [Director of the Resident Credentialing Committee](#), or the ACVS [Ombuds](#). Issues that cannot be addressed by the Resident Credentialing Committee will be forwarded to the Board of Regents.

The Ombuds can help facilitate issues that have not been resolved through traditional channels. The Ombuds serves as a neutral party during these negotiations.

Contact information for the Director of the Resident Credentialing Committee and Ombuds can be obtained from the ACVS office.

PUBLICATION REQUIREMENT

In keeping with the Constitutional objectives of the ACVS, each credentials applicant must demonstrate willingness to contribute to the literature. In addition to contributing to the literature, manuscripts originating from basic or clinical research enhance a resident's education by the learning of scientific methodology, which may lead to the discovery of new concepts, or substantiate or refute established methods. Manuscripts should demonstrate intellectual curiosity and should further the state of surgical knowledge or other closely related biological sciences.

CRITERIA FOR ACCEPTANCE OF A PUBLICATION

The minimum requirement is one publication fulfilling the following criteria:

- A. The applicant must be first or sole author. The publication must have resulted from the applicant's research or clinical investigation.
- B. The date of publication cannot be more than five years old by the deadline for credentials submission. The manuscript must be accepted for publication prior to August 1 of the year of application.
- C. The manuscript must be accepted by a publication on the [Approved Journals List](#). A manuscript is considered accepted when the author receives a letter of acceptance from the editor and further review by a reviewer is not required. ACVS considers a reviewer to be an outside reviewer and not an employee (editor) of the journal. Editorial notations or changes affecting sentence structure are acceptable. A copy of the accepted version of the manuscript (including the title page with author information and all images, tables and figures, OR, if in print, a copy of the published manuscript showing the date of publication must be submitted in the Credentials Application.

An emailed letter of acceptance from the editor of any journal on the Approved Journals List can be submitted in lieu of a paper letter from the journal, provided that the following conditions are met:

- The email must contain the date of acceptance in the body of the message (not simply in the header).
- The email must indicate the name of the manuscript.
- The print out of the email must show all routing information in the message header.

If a resident wants to publish in a journal not on the current Approved Journals List, a petition must be made to the Board of Regents, see Item b, [Petition to Add Publication to Approved Journals List](#).

- D. The manuscript must follow a scientific approach, containing:
 - an introductory statement which summarizes the reason for the study,
 - a clearly stated hypothesis or objective,
 - an appropriate description of techniques used to satisfy the hypothesis or objective,
 - a report of the results appropriate to the study,
 - a discussion which interprets the results and their relation to the original hypothesis or objective, and
 - a conclusion which summarizes the importance of the study.

These items need not be set apart under separate headers (i.e., Introduction, Materials and Methods, etc.) within the manuscript; some journals do not have such headers. However, these items must be clearly identifiable by the Resident Credentialing Committee reviewers to constitute an acceptable publication.

- E. Papers such as book chapters, proceedings, review articles and case reports are not acceptable.
- F. The information in the publication must not have been published previously by the same author, other than in abstract or proceedings form.
- G. Clinical studies, which fulfill the above criteria, are acceptable.
- H. The publication must be written in or fully translated to the English language.

Note: A candidate who is resubmitting a credentials application after three unsuccessful attempts at the examination is not required to resubmit a publication.

PETITION TO ADD PUBLICATION TO APPROVED JOURNALS LIST

If a resident wants to publish in a journal not on the current [Approved Journals List](#), and submit this publication as part of the Credentials Application, the resident should petition the Board of Regents via the Resident Credentialing Committee in advance to determine if the journal should be added to the Approved Journals List.

The petition must include the journal title and the following information: a summary of the journal's review and editorial process, current composition of the editorial board, current impact factor, and h5-index values.

In order for a journal to be considered for addition to the Approved Journal List, the following criteria will be considered by ACVS:

- A. The journal must be listed on MEDLINE.
- B. Previously published articles in the journal must reflect the scientific method and report hypothesis- or objective-driven research.
- C. The impact factor (as determined by [ResearchGate](#)) should be ≥ 0.8 .
- D. The h5-index (as determined by [Google Scholar](#) metrics:) should be ≥ 15 .

NOTE: Fulfillment of the above criteria does not guarantee approval of the journal, and *approval of the journal should be obtained prior to submitting an article for publication to that journal*. A journal can still be submitted for review by the RCC if it does not fulfill all of the above criteria; however, a detailed explanation must be provided indicating why the journal should be considered despite not meeting these criteria. All journals listed on the Approved Journals List are acceptable, even though they may not meet all of the criteria listed above.

The petition should be addressed to the Resident Credentialing Committee and emailed to residency@acvs.org for **receipt no later than August 1**. The Resident Credentialing Committee will review the journal during its annual business meeting at the ACVS Surgery Summit and submit a recommendation to the Board of Regents. The Board of Regents will review the Resident Credentialing Committee's recommendation during its February Board meeting and will make a final determination as to whether the journal will be added to the Approved Journals List. The resident will be notified in writing of the Board's decision. Any additions to the [Approved Journals List](#) will be published on the ACVS website following the Board of Regents' meeting.

OPTIONAL EARLY REVIEW OF PUBLICATION ACCEPTED IN AN APPROVED JOURNAL

Proof of having met the publication requirement must be submitted as part of the Credentials Application. Residents can request an optional early review of the publication from the Resident Credentialing Committee. These requests will be reviewed annually by the Resident Credentialing Committee. **Requests should be submitted online via upload to the resident's Certification Process application at www.acvs.org/apply on or before August 1.** Only one publication may be submitted per year for early approval. Residents will be notified of the outcome following the annual Resident Credentialing Committee meeting at the ACVS Surgery Summit (typically held in October).

The Early Publication Review request will consist of the following items:

- A. Manuscript (must include the title page with author information and all images, tables and figures), choose option 1 or 2:
 1. A [letter or email from the journal editor](#) indicating acceptance of the manuscript and the accepted version of the manuscript
 2. A copy of the published manuscript, indicating the date of publication

CREDENTIALS APPLICATION

Following completion of the Veterinary Surgery Residency, residents must submit an online Credentials Application to the Resident Credentialing Committee to determine eligibility to take the Phase II Surgical Competency Examination. Completed applications must be submitted and application fees must arrive at the ACVS office **on or before August 1** of the year preceding the anticipated examination, unless an extension has been granted by the Board of Regents.

Each applicant must use the online Credentials Application at www.acvs.org/apply and follow the instructions for submission as published the year in which he/she submits credentials. The *Credentials Application Guidelines* are published each year in April and are available on the ACVS website at www.acvs.org/residents/credentials-application.

For residents whose training starts after July 25, an extension may be requested from the ACVS Board of Regents for the submission of their Credentials Application. This petition must be submitted prior to the end of the resident's second year of training. The petition must be made in writing and sent to the Board in care of the ACVS office for arrival on or before August 1.

Residents must submit a credentials application within five years of completion of the residency. The applicant must meet all resident training requirements in effect at the start of the residency.

The application material includes:

- Statement of Compliance
- Resident Training Log information
- External Surgical Rotation Form
- Proof of passing the Phase I Surgical Knowledge Examination
- Publication or proof of previously approved publication
- Letter of Reference Forms
- Additional documentation

Residents who have completed their training and submit a Credentials Application must complete a program evaluation survey regarding their training experience. Completion of the survey is mandatory, but survey responses will not impact the outcome of the Credentials Application.

EXAMINATION

Two examinations are required for ACVS certification: **Phase I Surgical Knowledge** and **Phase II Surgical Competency**. Phase I should be taken during the residency, during year 2 if eligibility requirements are met. Phase II is taken after completion of the residency and acceptance of credentials. The most up-to-date information about the [Phase I](#) and [Phase II](#) examinations is available online.

ELIGIBILITY FOR THE PHASE I EXAMINATION

Eligible residents may take Phase I during the spring of their second year of training. **In order to be eligible to take the Phase I examination a resident must submit all components of their training for review by the Resident Credentialing Committee for each review cycle, and document the following:**

- a minimum of 50 activity weeks completed and approved by the Resident Credentialing Committee
- a minimum of two seminars completed and approved by the Resident Credentialing Committee, and
- two satisfactory Semi-Annual Reviews, covering 50 weeks of training and approved seminars.

Clarification: Semi-Annual reviews must span weeks and seminars.

Residents must submit log items on time for the February 1 and August 1 reviews in order to meet eligibility requirements. The Resident Credentialing Committee will review the training submitted by residents and notify residents of their eligibility by November 10 to take the Phase I Examination.

Final reading lists, examination fees, and details on the examination registration process will be available at www.acvs.org/residents/phased-exam. The Phase I examination will take place at regional testing centers in the continental U.S and Canada in late March/early April each year. Specific dates are posted on the ACVS website. It is not mandatory that the Phase I examination be taken in year 2, but the Phase I examination must be completed and passed before the candidate is eligible to take the Phase II examination.

PHASE I SURGICAL KNOWLEDGE EXAMINATION

The Phase I examination consists of questions that cover gastrointestinal, cardiovascular, respiratory, musculoskeletal, urogenital, neurologic, endocrine (small animal only), special senses and integumentary systems. In each organ system, questions will be asked on basic sciences (anatomy, physiology, pathobiology). Non-system-specific questions will be asked on pharmacology, and surgical and anesthetic principles.

[Large and small animal reading lists](#) are available online. Program Directors and Resident Advisors are encouraged to review the reading list and the overview of the contents of the Phase I examination, and to develop a plan to cover this material during the first year and a half of the residency. Residents are ultimately responsible for preparing for the examination.

This examination will not include current literature from journals or information regarding specific surgical procedures. Residents who do not pass the Phase I examination will be eligible to take it again the next year. The Phase I examination is considered a Resident Training Requirement and must be passed within 6 years of the start of the residency.

ELIGIBILITY FOR THE PHASE II EXAMINATION

In order to be eligible to take the Phase II examination all residency training requirements must be completed and approved by the RCC; the Phase I exam must be successfully passed; and a Credentials Application must be approved by the Resident Credentialing Committee and Board of Regents. Candidates will be notified of the date and location of the Phase II examination following acceptance of credentials. Dates will be also posted online.

PHASE II SURGICAL COMPETENCY EXAMINATION

The Phase II examination will be composed of 2 sections – a practical section and a case-based section.

The **practical section** will be comprised based on visually presented material of surgically-related diseases or conditions. Candidates will be provided visual images (still and videos), as well as written information for each question. Visual material may depict anatomic specimens, instruments, surgical diseases, pathologic/histologic specimens, imaging studies or other relevant information in order to test the candidate's recognition and interpretive skills covering all areas of surgical practice.

The **case-based section** will be comprised of 2 parts, Orthopedic/Neurosurgery and Soft tissue. The case-based section tests the candidate's management of a sequentially presented surgical case(s) prior to, during, and after surgery. Candidates will be provided visual and written information on the case and should be prepared to answer questions covering all areas of surgical practice. Each section of the examination is graded separately.

Failure to successfully complete both parts the Phase II examination in three attempts will require submission of a new Credentials Application to the Resident Credentialing Committee. Upon acceptance of the recredentialing application, candidates must both sections of the Phase II Surgical Competency Examination. Candidates will have three additional attempts to pass Phase II.

MAINTENANCE OF CERTIFICATION

Individuals who are board certified by ACVS in 2016 or later will be issued time-limited certificates and must undergo mandatory maintenance of certification (MOC). Initial certificates are effective until the sixth December 31 after examination. Upon successful maintenance of certification, Diplomates are issued revised certificates that are effective for a period of 5 years. Certificates awarded by ACVS show the initial date of certification and the current date of expiration. To maintain ACVS certification, Diplomates must complete and submit professional development activities in accordance with the *ACVS Diplomate Maintenance of Certification Policies and Procedures*. This information is available at www.acvs.org/moc.

FORMS AND FEES

FILING OF RESIDENCY PAPERWORK

Residents will not receive confirmation of their residencies and are not considered to be in a sanctioned residency until the Program Director's Statement, Statement of Compliance, and matriculation fee have been received by ACVS. After these items have been received, ACVS will confirm receipt and grant the resident access to the Resident Training Log (typically within 30 days of receipt of paperwork).

Paperwork may be submitted to the ACVS office via:

- Email: residency@acvs.org
 - Fax: 301-916-2287
 - Mail: ACVS, 19785 Crystal Rock Drive Suite 305, Germantown, MD 20874
- A. Program Director's Statement: must be submitted within 30 days of the resident's start date.
 - B. Statement of Compliance: must be submitted within 30 days of the resident's start date.
 - C. Registration of Resident Advisor: must be submitted within the first calendar quarter of the start date.

RESIDENCY FEES

- A. Matriculation Fee: A matriculation fee is assessed per resident. The fee must be received at the ACVS office within 30 days of the resident's start date. The matriculation fee is payable by check in U.S. funds or by MasterCard or Visa.
- B. Transfer Fee: Residents who discontinue training at a registered residency training program and continue their training at another registered residency training program will be charged a transfer fee. The fee must be received at the ACVS office within 30 days of the resident's start date at the new location.
- C. Current fees can be found on the ACVS website at www.acvs.org/residents/forms.

PAYMENT OF FEES

Fees are due with 30 days of resident's start date or date of transfer. ACVS will not allow late payment of matriculation or transfer fees due to delivery service problems, insufficient postage, international customs, computer/internet issues, etc.

- A. If paying fee by check, mail check and Matriculation/Transfer Fee Payment form to:

American College of Veterinary Surgeons
19785 Crystal Rock Drive, Suite 305
Germantown, MD 20874

The form can be downloaded from www.acvs.org/residents/forms.

- B. If paying by MasterCard or Visa, choose one of the following options:
- Residents paying the fee themselves can submit payment online at www.acvs.org/residents/fees.
Note: the payment will be recorded in the account of the person who is logged in to the website.
 - Fax the Matriculation/Transfer Fee Payment Authorization form to 301-916-2287
 - Mail to American College of Veterinary Surgeons, 19785 Crystal Rock Drive, Suite 305, Germantown, MD 20874 with Matriculation/Transfer Fee Payment Authorization form.

REFUNDS

- A. The matriculation fee is fully refundable if the Program Director's Statement and matriculation fee are received by ACVS prior to the resident's start date and ACVS receives written notification prior to the start date that the resident will not actually start.
- B. The matriculation fee is refundable (less \$50 processing fee) if the resident leaves the residency within the first 30 days. The refund request must be sent in writing to ACVS within two weeks of program discontinuation.
- C. The matriculation fee is not refundable in cases where the resident leaves the residency after the first 30 days.
- D. Transfer fees are not refundable.

FORMS

These forms will be used by the resident, Resident Advisor, and Program Director. With the exception of the Large and Small Animal Curricula and the Approved Journals List, the forms can be downloaded from the ACVS website at www.acvs.org/residents/forms. The curricula are included on the following pages of this document.

A. PROGRAM DIRECTOR'S STATEMENT

The Program Director is responsible for verification of pre-residency training and notification that a resident has initiated training by **sending a Program Director's Statement to the ACVS office within 30 days of the start of the residency**. The residency is not recognized by ACVS until this form is filed. Petitions for retroactive approval of residencies will be denied. Program Directors must file a form for each resident under their supervision including transfers from other programs.

B. CHANGE IN PROGRAM DIRECTOR

This form must be **submitted by the incoming Program Director prior to any planned change of Program Director**. In the event of an unplanned change, this form must be filed within 15 days of the change. The form must be signed by both the outgoing and incoming Program Director. One form must be submitted for all residents currently in training at the time of the change. If the change occurs at the same time new residents are starting at a program, then a Program Director's Statement must be completed for each new resident and the Change in Program Director must be submitted for existing residents.

C. REGISTRATION OF RESIDENT ADVISOR

The Program Director must assign a Resident Advisor to each resident within the first calendar quarter of the residency. The Resident Advisor is responsible for administration and evaluation of the general and specific training requirements for each resident. A Registration of Resident Advisor form **must be filed with the ACVS office within the first calendar quarter of initiating the residency**. A new form must be filed for each resident when the Resident Advisor changes.

D. STATEMENT OF COMPLIANCE TO ACVS RESIDENCY TRAINING STANDARDS AND REQUIREMENTS

The resident is required to [submit the Statement of Compliance within 30 days after the start of the residency](#).

E. EXTERNAL SURGICAL ROTATION FORM

If a resident fulfills part of their surgical requirements at a [location other than their primary practice/institution](#), an **External Surgical Rotation Form** must be submitted by the resident. In the case of collaborative programs, this form should be completed for any cases or rotations that occur outside of the practices/institutions that are registered as part of the collaboration. Each case on the form must have a case supervisor and be signed by that supervisor.

F. MATRICULATION/TRANSFER FEE PAYMENT AUTHORIZATION

G. APPROVED JOURNALS LIST (www.acvs.org/residents/approved-journals)

H. LARGE AND SMALL ANIMAL CURRICULA

These documents describe the specific surgery case requirements for the Large Animal Curriculum—Equine Emphasis, Large Animal Curriculum—General, and Small Animal Curriculum. The curricula are available on the following pages.

LARGE ANIMAL CURRICULUM—EQUINE EMPHASIS

The Large Animal Core Curriculum—Equine Emphasis consists of a minimum of 300 procedures. These procedures can be completed on any large animal species. Cases listed in the Surgery Logs to satisfy core curriculum requirements must be performed on live animals with spontaneously occurring disease. Procedures performed on cadaver limbs and dead animals are not allowed. Animals undergoing bilateral procedures may be counted only once per anesthetic period in the case log. Animals undergoing separate anesthetic episodes can be counted as undergoing separate procedures. Residents must log all eligible [surgical cases](#) performed for the entirety of the residency. All residency requirements must be met within six (6) consecutive years of program initiation.

Category	Minimum Surgeries	Minimum Directly Supervised
Abdominal Surgery Such as colic/gastrointestinal surgeries or intra-abdominal exploration.	45	23
Surgical Treatment of Angular Limb Deformities Such as transphyseal bridging.	4	4
Surgery of the Foot Such as debridement of osteomyelitis, neurectomy and wounds of the foot.	5	3
Fracture Fixation Such as procedures utilizing bone plates and/or screws for fracture stabilization or arthrodesis. Do not include orthopedic implant removal or jaw wiring.	7	4
Minimally Invasive Arthroscopy Such as carpus, fetlock, tarsocrural joint, femoropatellar joint and femorotibial joint.	30	15
Minimally Invasive Laparoscopy/Thoracoscopy	6	4
Ophthalmic Surgery Such as eyelid lacerations, corneal-scleral transpositions, orbital reconstruction and orbital fractures.	2	1
Tendon/Ligament Injuries and Deformities Such as distal check desmotomy, proximal check desmotomy, tendon lacerations and other tendon procedures, including tenoscopy.	10	5

LARGE ANIMAL CURRICULUM—EQUINE EMPHASIS continuation

Category	Minimum Surgeries	Minimum Directly Supervised
Upper Respiratory Surgery Such as prosthetic laryngoplasty and dental/paranasal sinus procedures. Tooth extracts not involving the paranasal sinuses should not be included in this category.	30	15
Urogenital Surgery Such as surgery of the penis, cryptorchidectomy, rectovaginal procedures (lacerations, fistulae, urethroplasty), ovariectomy, ruptured bladder, caesarean section, patent urachus, and laparoscopic ovariectomy and cryptorchidectomy.	15	8
Wounds, Reconstructions and Debridements Including abdominal and inguinal hernia repair (excluding strangulating).	25	13
Subtotal of specified procedures:	179	
Minimum of an additional 121 surgeries of any type, excluding routine procedures. Please note that additional surgical procedures should be classified under the categories listed above; if this is not possible, use the Other category. Surgeries such as jaw wiring and mandibular tooth extraction should be classified as Other. Surgeries classified in the Other category do not contribute toward the required number of Directly Supervised surgeries.	121	
TOTAL PROCEDURES:	300	

LARGE ANIMAL CURRICULUM—GENERAL

The Large Animal Core Curriculum—General consists of the following minimum 300 procedures. These procedures can be completed on any large animal species. Cases listed in the Surgery Logs to satisfy core curriculum requirements must be performed on live animals with spontaneously occurring disease. Procedures performed on cadaver limbs and dead animals are not allowed. Animals undergoing bilateral procedures may be counted only once per anesthetic period in the case log. Animals undergoing separate anesthetic episodes can be counted as undergoing separate procedures. Residents must log all eligible [surgical cases](#) performed for the entirety of the residency. All residency requirements must be met within six (6) consecutive years of program initiation.

Category	Minimum Surgeries	Minimum Directly Supervised
Abdominal Surgery Such as colic/gastrointestinal surgeries or intra-abdominal exploration.	52	26
Surgical Treatment of Angular Limb Deformities Such as transphyseal bridging.	4	4
Surgery of the Foot Such as debridement of osteomyelitis, neurectomy and wounds of the foot.	5	3
Fracture Fixation Such as procedures utilizing bone plates and/or screws for fracture stabilization or arthrodesis. Do not include orthopedic implant removal or jaw wiring.	5	3
Minimally Invasive Arthroscopy Such as carpus, fetlock, tarsocrural joint, femoropatellar joint and femorotibial joint.	15	8
Minimally Invasive Laparoscopy/Thoracoscopy	6	4
Ophthalmic Surgery Such as eyelid lacerations, corneal-scleral transpositions, orbital reconstruction and orbital fractures.	2	1
Tendon/Ligament Injuries and Deformities Such as distal check desmotomy, proximal check desmotomy, tendon lacerations and other tendon procedures, including tenoscopy.	10	5

LARGE ANIMAL CURRICULUM—GENERAL continuation

Category	Minimum Surgeries	Minimum Directly Supervised
Upper Respiratory Surgery Such as prosthetic laryngoplasty and dental/paranasal sinus procedures. Tooth extracts not involving the paranasal sinuses should not be included in this category.	25	13
Urogenital Surgery Such as surgery of the penis, cryptorchidectomy, rectovaginal procedures (lacerations, fistulae, urethroplasty), ovariectomy, ruptured bladder, caesarean section, patent urachus, and laparoscopic ovariectomy and cryptorchidectomy.	20	10
Wounds, Reconstructions and Debridements Including abdominal and inguinal hernia repair (excluding strangulating).	25	13
Subtotal of specified procedures:	169	
Minimum of an additional 131 surgeries of any type, excluding routine procedures. Please note that additional surgical procedures should be classified under the categories listed above; if this is not possible, use the Other category. Surgeries such as jaw wiring and mandibular tooth extraction should be classified as Other. Surgeries classified in the Other category do not contribute toward the required number of Directly Supervised surgeries.	131	
TOTAL PROCEDURES:	300	

SMALL ANIMAL CURRICULUM

The Small Animal Core Curriculum consists of the following minimum number of surgical procedures. These procedures can be completed on any small animal species. Cases listed in the Surgery Logs to satisfy core curriculum requirements must be performed on live animals with spontaneously occurring disease. Procedures performed on cadaver limbs and dead animals are disallowed. Only one procedure per animal per anesthetic period may be counted in the Core Curriculum log. Residents must log all eligible [surgical cases](#) performed for the entirety of the residency. All residency requirements must be met within six (6) consecutive years of program initiation.

Category	Minimum Surgeries	Minimum Directly Supervised
Abdominal Surgery Abdominal surgery not associated with the gastrointestinal or urogenital tract, such as adrenalectomy, splenectomy, inguinal hernia and diaphragmatic hernia.	10	5
Gastrointestinal Surgery Such as exploratory with biopsies of liver or intestines, intestinal resection/anastomosis, partial gastrectomy, liver lobe excision, partial colectomy, portosystemic shunt ligation, gastropexy, cholecystectomy, and cholecystoenterostomy.	50	25
Head/Neck Surgery Such as ear canal ablation, salivary gland removal, bulla osteotomy, rhinotomy, mandibular fractures, partial maxillectomy or mandibulectomy, thyroidectomy, arytenoid lateralization for laryngeal paralysis, ophthalmic procedures, and staphylectomy.	25	13
Minimally Invasive Surgery — Arthroscopy	15	8
Minimally Invasive Surgery – Laparoscopy/Thoracoscopy Do not include cases that are considered interventional therapy, i.e., those that are directed at palliative or definitive treatment by manipulation of tissue without incision.	5	5
Neurologic Surgery Such as intervertebral disc decompression/fenestration, thoracolumbar spinal fracture stabilization, atlantoaxial stabilization and lumbosacral disease.	30	20
Orthopedics- Fracture Fixation Such as fracture repair with external or internal fixation and mandibular fracture repair. Does not include cast placement or external fixator removal.	60	30

SMALL ANIMAL CURRICULUM continuation

Category	Minimum Surgeries	Minimum Directly Supervised
Orthopedics – Joint Replacement*		
A minimum of 3 joint replacement procedures	3	3
<i>*Amended Nov 2018—Three joint replacement cases must be logged in the Orthopedics – Joint Replacement category.</i>		
Orthopedics – Non-Fracture Joint Problems	60	30
Such as cruciate ligament procedures, routine patella luxation repair, joint exploration, femoral head and neck ostectomy, and triple pelvic osteotomy.		
Orthopedics – Other**	7	4
Such as tendon surgeries, biceps surgery, complex implant removal, limb sparing, total hip replacement, and osteotomy/ostectomies for angular limb or joint incongruities. Must include a minimum of 3 joint replacement procedures.		
<i>**Amended Nov 2018—Existing joint replacement requirement moved into separate category. Log cases in new category as indicated above. Minimum requirement for Orthopedics – Other category decreased by three total cases and one directly supervised case.</i>		
Skin/Reconstructive Surgery	35	18
Such as skin graft, pedicle flap, axial pattern flap, degloving injuries, perianal fistulas, perineal hernia, mastectomy, limb amputation, and anal saccullectomy. Do not include removal of cutaneous or subcutaneous masses, only the reconstructive techniques used to close the resulting defect.		
Thoracic Surgery	15	10
Such as exploratory thoracotomy, including sternotomy, ligation of patent ductus arteriosus, lung lobectomy, esophagotomy, and pericardiectomy. Do not include thoracostomy tube placement.		
Urogenital Surgery	35	18
Such as cystotomy, ectopic ureter repair, perineal or scrotal urethrostomy, prescrotal urethrotomy, nephrectomy, ovariohysterectomy for pyometra, and prostatic surgery.		
Subtotal of specified procedures:	350	
Minimum of an additional 50 surgeries of any type (to exclude routine ovariohysterectomies, castration, declaws, dental prophylaxis and other minor procedures). Please note that additional surgical procedures should be classified under the categories listed above.	50	
TOTAL PROCEDURES:	400	

TIMELINE FOR RESIDENCY TRAINING

This list includes responsibilities of the Program Director, Resident Advisor, and resident.

Prospective residency programs must submit an Application for Residency Training Program Registration by August 21, 2017. An application for renewal of registration must be submitted annually by the August deadline.

YEAR 1

- A. File Program Director's Statement within first 30 days. The resident should retain a copy.
- B. File the Statement of Compliance within first 30 days. The resident should retain a copy for inclusion in the Credentials Application.
- C. Submit the matriculation fee to the ACVS office within the first 30 days of the program.
- D. File Registration of Resident Advisor within first calendar quarter. The resident should retain a copy.
- E. Develop Residency plan (see [Resident Training Requirements](#)).
 1. Must include 110 weeks ACVS Diplomate supervised clinics, 18 weeks of Research/Manuscript time and appropriate weeks of Specialty Rotations.
 2. Specialty service training —appropriate number of weeks or hours in each required specialty (anesthesiology, diagnostic imaging, pathology, internal medicine/critical care).
 3. Identify Resident Advisor during first calendar quarter.
 4. Research project and publication (Publication must be accepted by approved journal prior to August 1 of the year in which credentials are submitted.)
 5. Review Core Curriculum
- F. Initiate documentation of training using the web-based Resident Training Log. Submit items for verification by the Resident Advisor or approval by the appropriate specialty board Diplomate.
 1. Activity weeks
 2. Surgery cases
 3. Seminars
 4. Educational events
 5. Specialty service rotations
 6. Anesthesiology and pathology cases
 7. Supervisors
- G. [Review Phase I Examination Reading List](#) and plan study schedule to complete appropriate portions prior to spring of year two, when the Phase I exam is offered.
- H. Hold performance and progress review with Resident Advisor (RA) twice yearly. The Resident Advisor should approve log items and complete a Semi-Annual Performance Review online. The Program Director needs to verify the review online.

- I. **Submit training for Resident Credentialing Committee (RCC) review on or before February 1 and August 1.**
The resident should complete entry of all log items in the [Resident Training Log](#) prior to each Semi-Annual Review and submit all items (weeks, seminars, and cases) for Resident Advisor verification. All Year 1 training needs to be entered online and verified by the Resident Advisor on or before February 1 and August 1. The Program Director must verify the Semi-Annual reviews for the year before February 1 and August 1. The resident must acknowledge the Semi-Annual Review on or before February 1 and August 1.

Residents with less than 8 weeks of training completed prior to either February 1 or August 1 do not need to submit items for that review period. Residents with more than 8 weeks of training must submit items for review by the Resident Credentialing Committee. The RCC will only review up to 60 new weeks of training at one time. Failure to submit items for RCC review in a timely manner may delay the submission of the credentials application at the end of Year 3.
- J. Evaluate progress toward requirements for Phase I examination. **Only items submitted in a timely manner for the February 1 and August 1 deadlines will count toward [Phase I examination eligibility](#).**
- K. If desired, the resident should [submit the manuscript for early review](#) at www.acvs.org/apply on or before **August 1**.
- L. Check Approved Journals List for current publications. If desired, submit [petition for addition to the Approved Journals List](#) to ACVS by **August 1**.
- M. For residency programs that start after July 25, submit petition to Board of Regents for extension of the Credentials Application deadline from August 1 to August 10. Petition must be submitted in advance of the third year. Petitions must be made in writing and sent to the Board in care of the ACVS office.
- N. Residents who had items declined by the Resident Credentialing Committee should make changes and submit for review during the next RCC evaluation period (by August 1 or February 1.).

YEAR 2

- A. Continue to maintain the Resident Training Log. Review progress toward satisfactory completion of core curriculum and activity week requirements.
- B. Continue specialty training requirement. Training should be entered online and submitted for approval by the appropriate specialty board Diplomate.
- C. Continue with research project and publication preparation.
- D. Continue reading Phase I examination materials. Verify that minimum requirements have been met for Phase I examination. **Residents will be notified by November 10 of their eligibility.** If eligible, apply for the [Phase I examination](#) (application deadline is mid-December).
- E. Assess performance and progress in residency every 6 months with RA.
- F. All training items must be entered online by the resident and verified by the Resident Advisor for Year 2 before February 1 and August 1. The Program Director must verify the Semi-Annual Review before February 1 and August 1. The resident must acknowledge the Semi-Annual Review on or before February 1 and August 1.

- G. If desired, submit publication for early review by the Resident Credentialing Committee at www.acvs.org/apply by August 1.
- H. If desired, submit request to the RCC for journal approval to the ACVS office on or before August 1 if targeted journal is not on the Approved Journals List.
- I. If not submitted in year 1, residency programs that start after July 25, submit petition to Board of Regents for extension of the Credentials Application deadline from August 1 to August 10.
- J. Residents who had items declined by the Resident Credentialing Committee should make changes and submit for review during the next RCC evaluation period (by August 1 or February 1).

YEAR 3

- A. Read the [Credentials Application Guidelines](#). New guidelines are typically available in April.
- B. Continue to maintain all online documentation. Review progress in core curriculum and activity week requirements.
- C. Continue specialty training requirement. Submit rotations for approval by the specialty Diplomate as they are completed.
- D. Publication must be accepted before credentials application submission.
- E. If necessary, register to retake for the Phase I Examination (deadline is in mid-late December).
- F. If the Phase I Examination was passed, review proposed material for Phase II examination.
- G. Review performance and progress in residency every 6 months with RA.
- H. All training items must be entered online by the resident and verified by the Resident Advisor before February 1 and August 1. The Program Director must verify the Semi-Annual Review before February 1 and August 1. The resident must acknowledge the Semi-Annual Review on or before February 1 and August 1.
- I. Residents who had items declined by the Resident Credentialing Committee should make changes and submit for review during the next RCC evaluation period (by August 1 or February 1.)
- J. The Program Director must initiate Program Completion in the web-based log after verifying all training, completing the final Semi-Annual Review and approval by the Program Director of the final review.
- K. If submitting a [Credentials Application](#) at the end of the third year, electronic copies (.PDF, .XLS, etc.) of the following items will be required for upload:
 - 1. A copy of the email notification of Program Completion.
 - 2. Screenshot of Program History screen from Resident Training Log.
 - 3. External Surgical Rotation form(s) with all required signatures
 - 4. Include all other required materials as outlined in the *Credentials Application Guidelines*.

- L. Residents who wish to keep access to their case log data should export the cases from the Resident Training Log. Residents will lose access to the logs after a period of time.

Residents who have not completed their 156 weeks before August 1 will need to continue into the fourth year. Such residents should use the Year 3 timeline for guidance.