AMERICAN COLLEGE OF VETERINARY RADIOLOGY

Diagnostic Imaging Residency Program
Essential Training Standards and Requirements

Updated: November 22, 2022
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>Objectives</td>
<td>3</td>
</tr>
<tr>
<td>Terminology</td>
<td>3</td>
</tr>
<tr>
<td>Description of Program Types</td>
<td>4</td>
</tr>
<tr>
<td>Traditional Residency Training Program</td>
<td>4</td>
</tr>
<tr>
<td>Alternative Residency Training Program</td>
<td>4</td>
</tr>
<tr>
<td>Residency Program Review and Approval</td>
<td>5</td>
</tr>
<tr>
<td>Annual Update of the Residency Program</td>
<td>6</td>
</tr>
<tr>
<td>Training Period</td>
<td>6</td>
</tr>
<tr>
<td>Direction and Supervision</td>
<td>7</td>
</tr>
<tr>
<td>Residency Director</td>
<td>7</td>
</tr>
<tr>
<td>Supervising Diplomates</td>
<td>7</td>
</tr>
<tr>
<td>Supporting Diplomates</td>
<td>8</td>
</tr>
<tr>
<td>Other Specialists</td>
<td>8</td>
</tr>
<tr>
<td>Resident Supervision</td>
<td>9</td>
</tr>
<tr>
<td>Resident Numbers</td>
<td>9</td>
</tr>
<tr>
<td>Equipment/Facility Requirements</td>
<td>9</td>
</tr>
<tr>
<td>Clinical Resources</td>
<td>9</td>
</tr>
<tr>
<td>Training Content</td>
<td>10</td>
</tr>
<tr>
<td>Reporting</td>
<td>10</td>
</tr>
<tr>
<td>Caseload</td>
<td>10</td>
</tr>
<tr>
<td>Procedures and Image Acquisition</td>
<td>11</td>
</tr>
<tr>
<td>Formal Courses &amp; Degree Programs</td>
<td>11</td>
</tr>
<tr>
<td>Research Requirements</td>
<td>11</td>
</tr>
<tr>
<td>Educational Environment</td>
<td>11</td>
</tr>
<tr>
<td>Formal Lectures</td>
<td>11</td>
</tr>
<tr>
<td>Known Case Conferences</td>
<td>12</td>
</tr>
<tr>
<td>Other Educational Events</td>
<td>12</td>
</tr>
<tr>
<td>Teaching File</td>
<td>12</td>
</tr>
<tr>
<td>Affiliation Agreements</td>
<td>12</td>
</tr>
<tr>
<td>Resident Registration</td>
<td>13</td>
</tr>
<tr>
<td>Resident Evaluation</td>
<td>13</td>
</tr>
</tbody>
</table>
Examination Requirements ................................................................. 14
Changes to the Residency Program ..................................................... 15
Residency Program Probation or Suspension ........................................ 16
  Probation: .................................................................................. 16
  Suspension: .................................................................................. 17
Monitoring Program Compliance ......................................................... 17
Resident Transfers ........................................................................... 18
Appeals ......................................................................................... 19
Residency Program Questions or Concerns ......................................... 19
Summary Highlights: ........................................................................ 20
  ACVR Residency Director Responsibilities: ................................... 20
  ACVR Residency Program Requirements: ...................................... 20
  ACVR DI-RSEC Responsibilities: .................................................. 20
Introduction

As a recognized specialty organization of the American Veterinary Medical Association (AVMA) American Board of Veterinary Specialties (ABVS), the American College of Veterinary Radiology (ACVR) must provide requirements for advanced postgraduate training, education, and certification as a specialist in veterinary diagnostic imaging.

This document describes in detail the structure and content of a veterinary radiology residency training program which will meet the expectations of the ACVR, and acts as a guide for institutions desiring formal approval of their radiology residency training program by the ACVR.

The updated policies, procedures, and requirements outlined in this document will be in effect for all residency programs as of January 31, 2022.

Veterinary radiology encompasses a variety of diagnostic imaging techniques, including the following five core areas: all aspects of Roentgen diagnosis; diagnostic ultrasound; computed tomography (CT); magnetic resonance imaging (MRI); and diagnostic nuclear medicine.

Objectives

All residency training programs must:

- offer a quality postdoctoral medical educational experience of adequate scope and depth to promote aptitude and clinical proficiency in image interpretation in the five core areas of diagnostic imaging for both small and large animal species.
- prepare residents adequately for future employment as diagnostic radiologists in any variety of settings including academia, private practice and/or teleradiology services. provide opportunities for professional development in the areas of teaching, evaluation of scientific literature, and clinical research.

Terminology

1. **ACVR Diplomate**: The ACVR Constitution states that a “Diplomate” is a veterinarian of good moral character who satisfactorily complies with the training and experience requirements, successfully completes the certifying examination, and is approved for membership in the ACVR by a majority of the Executive Council.
2. **ACVR Associate Member**: The ACVR Constitution states that an “Associate Member” is any individual who has excelled in a field of radiology or associated science. This individual must have made a documented contribution to the advancement of the ACVR.
3. **ACVR Resident Member-in-Training**: The ACVR Constitution states that a “Resident Member-in-Training” status shall be bestowed upon individuals who are actively engaged in an approved formal training program in diagnostic radiology or radiation oncology, or in an alternative training program in diagnostic radiology or radiation oncology approved by Executive Council.
4. **Supervising Diplomate**: An ACVR or ECVDI 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.
5. **Residency Director:** A supervising ACVR diplomate who provides on-site clinical supervision to the residents at the primary training institution for at least 50% of the year, is the primary contact person for the residency program with the ACVR, and is responsible for completing all necessary forms/reviews and notifying RSEC of any changes to the program.

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

7. **Institution:** A physical hospital, facility or university where training of radiology residents is conducted.

### Description of Program Types

#### Traditional Residency Training Program

*A traditional residency training program satisfactorily meets all residency program requirements as set forth by ACVR and may be approved for one or more residents.*

The residents in this type of program spend the majority (at least 50%) of their clinical requirement at one institution, and this institution meets all the requirements for training, equipment, diplomate supervision, and case load. Occasional external rotations may be completed outside of the primary institution. The Residency Director must be located in and/or affiliated with the primary training institution to provide on-site clinical supervision to the resident(s) for at least 50% of the resident’s training. In a traditional residency program, residents may be accepted into the program at the discretion of the program, not to exceed the maximum number of residents per faculty as outlined in the [Resident Numbers](#) section of this document.

#### Alternative Residency Training Program

*An alternative residency training program satisfactorily meets all residency program requirements as set forth by ACVR and is designed for one specific individual/resident.*

This type of program may be a new program or a modified/amended traditional program, such as a traditional program that will be completed in an extended timeline. Residents in alternative programs may complete all of their training requirements at a single institution, or training may be a collaborative effort between multiple institutions; however, the number of collaborating institutions must not be too large to deter from the resident’s experience. One site must be designated at the primary institution. The Residency Director in an alternative residency program must still be located on-site at the primary institution and must still provide on-site clinical supervision to the resident for at least 50% of the resident’s training.
Residency Program Review and Approval

The Residency Standards and Evaluation Committee (RSEC) receives and reviews all new residency program applications and 3-year re-accreditation applications for existing programs. The RSEC review is performed to ensure the program meets all the requirements set forth by the ACVR, including those relating to diplomate supervision, educational environment, facilities, and program content. The Chair or Assistant Chair of RSEC may contact the program director for additional information or clarification on the residency program application at any time throughout the review process, and generally within 3-4 weeks of receiving an application. The Residency Directors must respond to any RSEC inquiries at their earliest convenience within 2 weeks to ensure timely review. If the program is found to be deficient in one or more areas, the application will be returned to the Residency Director with specific feedback and/or comments from RSEC. The Residency Director will then be given 2 weeks to amend the application or define a plan to correct the deficiencies. All communications will occur via email.

Once the program is deemed satisfactory to RSEC, the program will be presented to the ACVR Executive Council (EC) for approval by majority vote. Both RSEC and ACVR Executive Council must formally approve program applications before resident training can commence. The entire approval process usually takes a minimum of 2-3 months, and may take longer if substantial program modifications are needed to satisfactorily meet the requirements.

In accordance with the ACVR Constitution, all supervised residency training programs must be approved by Executive Council by September 1 two years in advance of the resident’s anticipated examination date (i.e. residents must train in an approved program for at least 2 years in order to qualify to take the ACVR preliminary board exam). Therefore, all program applications should be submitted to RSEC well in advance of the desired start date to allow ample time for application review, clarification within the committee, and final approval by Council. RSEC will accept applications year-round, and requests that these be submitted 6 months in advance of the desired resident training start date for new programs.

The approval process for new residency programs takes several months. Applications should be submitted 6 months in advance of the desired resident training start date.

To ensure timely committee review, the sponsoring diplomate should contact the RSEC chairperson directly upon submission of any standard or alternative Training Program application that is submitted outside of the typical January 31 submission date. An annual deadline of January 31 is in place for renewal of all currently registered programs, whose registration expires in the same year. Delinquent submission of renewal applications > 3 months beyond the deadline will be grounds for probation of a residency program.

The Residency Director will be notified via email of the outcome of the program’s application or renewal within two weeks of Executive Council’s vote. If a renewal application does not meet all of the requirements, but the deficiencies could be corrected/modified in a reasonable time, the program will be placed on probation. If a program has significant deficiencies in the requirements (i.e. loss of all faculty) that cannot be corrected/modified in a reasonable time, the program will be suspended.

All traditional and alternative programs will be approved for a period of 3 years, from July of the year of approval to July 3 years later. For example, if a program applied in January 2021 and was approved in April 2021,
the program will be approved until July 2024; the Residency Director will need to submit a renewal application by January 31, 2024.

If a program is approved in October, but will not begin training residents until July of the following year, the program will be approved for 3 years following the start of the residents. For example, if a program applied in July 2021 and was approved in October 2021, but residents do not start training until July 2022, then the program will be approved until July 2025. If the program starts training residents prior to July, the approval date would be considered 3 years following the residency start date.

Of note, even if a program is satisfactory to RSEC and ACVR EC, the ACVR does not accredit, certify, promise, or guarantee the results or satisfaction with any residency program. Additionally, ACVR has no liability for the conduct or actions of the faculty/diplomates or residents within a program.

Program application forms can be found here: https://acvr.org/dashboard/resources/forms-pertaining-to-residency-directors/. A current curriculum vitae (CV) for all ACVR and/or EVDI diplomates and other specialists participating in resident training must be submitted along with a new program application or a reaccreditation form.

Annual Update of the Residency Program
The Residency Directors of all programs must submit an online annual update form by January 31 of each year to maintain status as an approved program. Program annual update forms can be found here: https://acvr.org/dashboard/resources/forms-pertaining-to-residency-directors/

Delinquent submission of annual program update forms > 3 months beyond the deadline will be grounds for probation of a residency program.

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Annual updates for existing programs are due on January 31 every year except when a full renewal application is due. Renewal applications for existing programs are due on January 31 every 3 years.

Delinquent submission of annual update or renewal forms will be grounds for program probation.

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Training Period
The program shall offer a minimum of 3 years (36 months) of postdoctoral medical education in veterinary radiology, of which at least 30 months of training must be supervised clinical experience (based on full-time employment work week). A maximum of 5 years is established for completion of training. A one-year internship, internship-equivalent, or clinical practice experience is required to be accepted into ACVR residency training. The training period will start after written approval of the program is granted (approval letter), and no amount of resident training can be retroactive.
Direction and Supervision

Residency Director

In addition to residency training program administration, the Residency Director must also be actively involved in the training and instruction of residents. The Director must be an active Diplomate of the ACVR in good standing, and must contribute sufficient time to the training program to ensure adequate direction which includes supervising the residents on clinical duty at least 50% of the year (equivalent to 24 full-time work weeks per year).

The Residency Director will be the ACVR’s contact for the residency training program. Official communication between individual residency directors and DI-RSEC will occur primarily via email while general announcements to residency directors and/or residency programs will often be initiated through Discourse (https://community.acvr.org/). Please ensure that your contact information remains updated with ACVR and that you are familiar with Discourse and its notification options.

The Residency Director is responsible for:

1. Submitting the initial residency program application and subsequent renewal applications every 3 years using official DI-RSEC forms.
2. Submitting official annual program updates.
3. Submitting official semi-annual resident reviews.
4. Notifying DI-RSEC in advance of any planned changes to the program (including changes in Residency Director) and within 30 days of unplanned changes. Failure to notify RSEC/ACVR may result in placement of the program on probation or suspension.
5. Notifying RSEC within 30 days if, for any reason, a resident:
   a. is at risk of becoming ineligible to take the board exam on schedule
   b. has an extended leave of absence during the residency
   c. needs to discontinue the residency
   d. is terminated from a residency program
6. Registering all residents with the ACVR.
7. Ensuring that residents are on track with board exam eligibility and approving the resident’s preliminary and certifying examination applications by confirming that residents have met minimum training requirements as outlined in the Examination Requirements in this document.

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Forms needed to complete program applications, 3-year renewals, annual updates, and resident evaluations: https://acvr.org/dashboard/resources/forms-pertaining-to-residency-directors/

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Supervising Diplomates

Supervising Diplomates are ACVR or ECVDI diplomates with appropriate expertise and training who participate in all facets of resident training, participate in clinical service/oversight of imaging cases for a minimum of 400 hours per year, and who provide primary support and mentorship to the residents in the residency program. The Residency Director is a Supervising Diplomate. The Supervising Diplomates in the program must be in good standing with the ACVR or ECVDI and must be qualified in those areas in which they are assigned to instruct.
• The Supervising Diplomates in the program must be committed to the teaching of the residents. The time and effort they devote to the educational program must be documented at the time of the initial application and renewal and at each yearly update by providing effort allocation information (e.g. number of weeks on clinics/oversight of imaging cases).

• The program must include at least two Supervising Diplomates (2 Dipl ACVR or 1 DACVR/1 Dipl ECVDI).
  o The Residency Director must qualify as a Supervising Diplomate, be on-location at the primary institution, and provide clinical supervision and oversight to the residents at least 50% of each year of the training program (equivalent to 24 full-time work weeks per year).
  o The remaining Supervising Diplomate(s) may be at a different location as long as they are consistently available for direct interaction with residents for the minimum hours as prescribed, whether via scheduled resident rotations at this different location or by direct availability throughout the day via video or audio interaction. Supervising Diplomates that work outside of the primary institution are required to be available for consultation on all clinical cases when they are scheduled on clinical service as a resident supervisor (i.e. for 400 hours per year).
  o As an alternative to a single individual, the second Supervising Diplomate can be comprised of a combination of multiple, but no more than 10, teleradiologists or off-site/remote radiologists; in this case, each individual must provide residents’ supervision for a minimum of 3 weeks per year.
  o Off-site Supervising Diplomates cannot be included in the Supervising Diplomate:resident ratio defined below in the Resident Numbers section of this document.

Supporting Diplomates
Supporting Diplomates are ACVR or ECVDI Diplomates with appropriate expertise and training who aid in residency training, mentorship, and/or oversight but provide support that is limited, as by modality (e.g. only works in ultrasound), time commitment (e.g. clinical duty/resident oversight <400 hours per year), or other constraints that prevent them from qualifying as a Supervising Diplomate. Supporting Diplomates cannot be included in the Supervising Diplomate:resident ratio defined below in the Resident Numbers section of this document.

Other Specialists
In addition to the ACVR/ECVDI Diplomates, the program must arrange for the resident(s) to have direct access to specialists in other disciplines, including a minimum of one full-time (based on a 40-hour work week) diplomate each from the American College of Veterinary Pathology, American College of Veterinary Internal Medicine, and the American College of Veterinary Surgeons. Affiliated specialists must agree to support the ACVR residency program through clinical activity that allows regular interactions between the specialist and the diagnostic imaging residents (e.g. discussion of diagnostic case work-up, imaging findings, or patient outcomes, access to non-imaging specialist reports/case records, and/or participation in interdisciplinary rounds, etc). These specialists must be on-site at the primary institution OR have explicit affiliate agreements outlining the scope of their intended interactions with the trainees. Residents must be provided access to reports and procedural notes on cases derived from the imaging case load of the residency program.
Individuals assuming primary responsibility for training in an area (e.g. large animal radiology, echocardiography, etc) need not be Diplomates of the ACVR or ECVDI if sufficient expertise can be documented. These individuals should be listed in the program application with CVs attached to outline appropriate credentials.

**Resident Supervision**
Clinical duty including teleradiology image interpretation must be a *supervised* educational process; unsupervised clinical responsibility alone does not constitute a suitable educational experience. Residents must have access (either on-site or remotely) to a Supervising or Supporting Diplomate at all times during business hours and during after-hours on call duty (if applicable). Ultrasound training must be hands-on and directly supervised by an ACVR or ECVDI Diplomate to meet the caseload requirement as defined in the [Training Content](#) section of this document. At the discretion of DI-RSEC, limited extensions for direct supervision by a non-ACVR/ECVDI diplomate may be made for certain specialty-level ultrasounds (e.g. echocardiography supervised by DACVIM - Cardiology).

**Resident Numbers**
The number of residents in the program cannot exceed twice the number of ACVR/ECVDI Supervising Diplomates on-site. This is true even for programs utilizing off-site Supervising Diplomates (i.e. off-site Supervising Diplomates do NOT count as on-site for purposes of calculating maximum resident number allowable for any training program).

**Equipment/Facility Requirements**
The program must provide adequate space, equipment, and other pertinent facilities to ensure an effective educational experience for residents in veterinary radiology. The program must have physical access to modern diagnostic imaging equipment, including digital or computed radiography, fluoroscopy, ultrasound (including Doppler), MRI and CT. Cone-beam CT alone does not satisfy this requirement. Access to equipment need not be entirely on-site at the primary institution. If needed, affiliate agreements will be allowed between the primary training site and external facilities to meet minimum standards for equipment access. Residents are required to practice image acquisition and protocol set-up for each of these modalities via supervised time with operating technicians (or similar experience).

Likewise, access to equipment to support supplemental training areas such as nuclear medicine, large animal radiology, and echocardiography need not be on-site; however, external rotations with formalized affiliate agreements and/or organized and maintained self-study modules with actual imaging studies from these modalities must be available for any modality or supplemental diagnostic imaging area that is not available on-site at the primary institution.

**Clinical Resources**
An approved diagnostic imaging residency program must provide a sufficient volume and variety of patients for instruction. The imaging caseload of the program must be greater than 7,000 imaging studies annually if the program is to be completed within the minimum 36 month period.
An imaging study is defined as a study of an anatomical area (e.g., thorax, abdomen, fetlock, stifle, etc.), regardless of the imaging modality used. Multiple examinations may be performed on a single patient. A heavy caseload cannot reduce the minimum time commitment; however, a low caseload may extend the actual time commitment beyond the minimum.

Training Content

The program must provide an adequate depth and breadth of clinical experience. Clinical duty including ultrasound and teleradiology image interpretation must be a supervised educational process; unsupervised clinical responsibility alone does not constitute a suitable educational experience. Neither unsupervised clinical work nor time spent away from the clinic for research projects, study time, CE courses/conferences or vacation will count towards the clinical training requirements for board exam eligibility as outlined in the Examination Requirements section.

Reporting

- The resident must generate timely reports from the imaging caseload, and the majority of these reports should be reviewed by a training radiologist within 2 workdays. The number of reports generated daily by the residents should be commensurate to the resident’s experience, but should not exceed 50 reports per day in the first two years of the residency.
- The vast majority (at least 80%) of typed reports generated by a resident without oversight by a faculty mentor must be reviewed with the resident and approved by at least one faculty member of the program. Alternatively, if the faculty mentor supervises the interpretation and dictation of the case, the final typed report does not need to be reviewed.

Caseload

Over at least 30 months of supervised clinical training, a resident must interpret the following minimum number of studies:

- Radiology (including fluoroscopy): 4,000
- CT: 300
- MRI: 200
- US: 1,000

To qualify as “interpretation” for caseload calculation purposes, the resident must be present at the time the study is initially interpreted, actively review case images, and provide a written report consisting of a diagnostic assessment (i.e. findings, diagnosis and/or differential list) that results in specific feedback from a training diplomate. More than one resident can interpret a single study; however, cases viewed while passively attending rounds, during independent study, or otherwise without specific radiologist feedback for the resident will not be included in caseload minimums as defined above.

The program must provide the residents with exposure to large animal diagnostic imaging, nuclear medicine, echocardiography, and interventional radiology (including stents, coils, etc.). If any of these modalities/procedures are not available on-site at the primary institution, external rotations with formalized
affiliate agreements, organized and maintained self-study modules with actual imaging studies from these modalities, and/or pre-planned resident enrollment in continuing education courses must be arranged.

Procedures and Image Acquisition
- During the 30 months of clinical training, a resident must *perform* a minimum of 1,000 ultrasounds. These will usually be the same cases that the resident interprets and generates a report for (as described in the *Caseload* section).
- Hands-on training for ultrasound-guided fine needle aspirate and biopsy procedures is required.
- Residents are required to practice image acquisition and protocol set-up for all modalities except nuclear medicine.

Formal Courses & Degree Programs
- Formal didactic classes, tutorials, organized topic rounds, and/or other study material must be available in the areas outlined in the ACVR Board Certification Content Outline and Study Guide.
- If an optional graduate degree is available in the program, the impact of the degree option must be explicitly stated. If the optional degree program dilutes the clinical experience below the required clinical commitment, during the first 36 months of the program it must be submitted as a separate alternative program.

Research Requirements
The program should provide an environment in which a resident is strongly encouraged to engage in investigative work with appropriate supervision, either by training diplomates in the program or by external personnel with expertise in the area of interest. These projects may take the form of basic research, clinical research in the form of a prospective or retrospective study, or a case series or case report. Documentation of this environment should be made in the institution's application.

Educational Environment
The education in diagnostic imaging should occur in an environment which encourages the interchange of knowledge and experience among residents and staff in the program, as well as with residents in other major clinical specialties located in those institutions participating in the program.

Formal Lectures
Residents should be provided ample opportunity to present formal lectures. It is expected that each resident will prepare and present a minimum of 3 lectures, seminars, or scientific presentations during the course of the residency training program. Examples include: lectures to students (if supervised), seminar presentations to peers, Continuing Education presentations, and formal scientific presentations to colleagues in the training institution or at conferences. Unsupervised lectures, informal topic or case-based rounds, journal article reviews, small group and laboratory teaching, and presentations to the general public (i.e. 4-H meetings, career days, etc.) will not be counted.
**Known Case Conferences**

At least 12 Known Case Conferences (KCC) must be provided annually. In KCC, the faculty selects cases that the resident has never seen and where the diagnosis/outcome has been unequivocally confirmed. These cases are then presented to the residents as unknowns. These conferences may take different forms, but they must be designed to test the progress of the resident's pattern recognition and medical decision-making skills.

**Other Educational Events**

Intradepartmental educational events (e.g. journal/textbook club, topic rounds, Morbidity and Mortality [M&M] Rounds) must occur a minimum of twice a month.

Interdisciplinary conferences and teaching rounds including other major specialty departments (such as surgery, internal medicine, etc.) must also be scheduled routinely. These events should allow progressive resident participation and include residents, training diplomates, and staff on a regular basis.

Mock exams are encouraged as a way to monitor resident’s progress.

Pathology is considered the basis for radiologic diagnosis, and the resident must be given the opportunity to attend imaging-pathology correlation rounds or have routine access to written pathology reports generated from the imaging case load of the residency program.

**Teaching File**

A teaching file of images referable to all aspects of diagnostic imaging must be available for use by residents. This file should be indexed, coded, and currently maintained.

**Affiliation Agreements**

Resources and personnel outside of the primary training institutions are often utilized for the clinical education of a radiology resident. When engagement of these resources and personnel are necessary in order for the program to meet minimum requirements as outlined in the remainder of this document, then standardized letters of agreement must be provided to RSEC.

Common needs for formalized affiliation agreements include necessary employment of the following external resources (originating outside of the primary training institution):

- training diplomates for resident education, including supervising and supporting radiologists and outside specialists (such as DACVS, DACVIM, and DACVP)
- rotations or remote institutional support to supplement resident imaging caseload numbers, species variety, imaging modalities, or study types
- access to modern diagnostic imaging equipment and/or rotations to provide resident training in image acquisition
- support to supplement resident training via topic rounds, journal club, known case conference, other board prep, etc.
• access to medical library resources, literature, and research support

Affiliation agreements must be signed and dated on official institutional letterhead, if possible, and must be refreshed with a new agreement letter with each 3-year program renewal application.

Standardized affiliation agreements should include:

• external affiliate institution name
• external affiliate supervisor or responsible party contact information with email address
• external affiliate supervisor or responsible party qualifications (i.e. board certifications, credentials, or other notation of expertise that would be required for resident training/support in the manner requested)
• specific purpose, nature, and scope of affiliation including information about:
  o how the affiliation specifically addresses ACVR residency program minimum standards and requirements for the requesting program;
  o how the resident will be supervised, access training content at the affiliate institution (e.g. images, reports, medical records, procedural notes, etc), and/or receive feedback from the affiliate supervisor;
  o the format of supplemental training and external rotations;
  o and, if the purpose of the affiliation is to support resident caseload numbers in any core modality/category, the expected number of reports that individual residents can expect to generate (with radiologist feedback) over the course of the external rotation (or other period of support) for cases in those categories
• time period for which the agreement will be in place
• name of specific residents for whom the agreement is for, if possible (i.e. alternative residency trainees)
• absolute or maximum number of residents to be trained under the affiliation agreement
• amount of time an individual resident will spend training with the external institution

Resident Registration
Residency Directors must register all new residents with the ACVR within 30 days of the residency program start date. Delinquent resident registration beyond 90 days of the residency training start date may be grounds for program probation.

Resident Evaluation
The in-training evaluation of resident performance and progress must be documented every 6 months through appropriate techniques, including faculty/supervising Diplomate/review committee appraisal, oral or written tests, or a combination of these. The resident’s performance evaluation and constructive feedback should be shared with the resident.
The Residency Directors will confirm every 6 months that their listed residents have met clinical requirements during the previous 6 months of the residency program based on an internal review. The semi-annual reviews are due on January 31 and July 31 of each year. Once training is approved or denied at the semi-annual review, it cannot be changed at a subsequent time. Delinquent submission of semi-annual resident review forms > 3 months beyond the deadline may be grounds for probation of a residency program.

**The Residency Director’s assessment of each resident’s clinical progress is due on January 31 and July 31 every year.**

**Resident registration and evaluation forms are found here:**
https://acvr.org/dashboard/resources/forms-pertaining-to-residency-directors/

Delinquent submission of resident evaluation will be grounds for program probation.

If the clinical requirements have not been met during the previous 6 months of the residency program (e.g. due to extended absence), the Residency Director is required to provide a letter that documents how much clinical training has been missed and explains or summarizes the resultant deficiencies in resident training. This letter must be signed by the resident and Residency Director and then submitted via email to the RSEC Chair.

- If the resident has policy-based concerns, he / she should contact the Executive Director of the ACVR. All interpersonal conflicts need to be moderated by the Institution’s and Human Resources Department.

- Each resident must submit credentials to RSEC prior to being accepted as being qualified to take the board examination.

- A survey will be given to each resident following completion of their program, and 3 years later. The findings of this survey will be provided to the ACVR Council and RSEC committee members.

**Examination Requirements**

Residency Directors and residents should review Article III of the ACVR Constitution and By-Laws as well as the Examination Resources posted on the ACVR website (acvr.org/dashboard/resources/acvr-di-examination/).

All residency programs must be submitted to Executive Council for approval at least 2 years in advance of anticipated Preliminary Examination (September 1). The Residency Director must be an active Diplomate of the American College of Radiology and must maintain the residency program to meet or exceed the minimum standards outlined in this document.

The candidates must:

1. have satisfactory moral and ethical standing in the profession.
2. be a graduate of a School or College of Veterinary Medicine accredited or approved by the AVMA, or possess a certificate issued by the Educational Commission for Foreign Veterinary Graduates
(ECFVG), or are legally qualified to practice veterinary medicine in some state, province, territory or possession of the United States, Canada, or other country.

3. have supervised training in a residency program that meets minimum standards as outlined in this document and is approved by the Executive Council of the ACVR, including
   a. at least 24 months of residency training that includes at least 20 months of clinical training prior to sitting the Preliminary Examination.
   b. at least 36 months of residency training that includes at least 30 months of clinical training prior to sitting the Certifying Examination.

4. submit to the Executive Council a statement of his/her qualifications and other evidence of their professional experience and competence, and answer, in detail, a questionnaire presented by the Executive Council (typically in the form of the exam application).

5. submit two names for letters of reference of his/her personal and professional competency, including a letter from his/her sponsor.

6. satisfactorily pass the Preliminary Examination before sitting for the Certifying Examination.

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**Review Article III of the ACVR Constitution and visit the Examination Resources webpage at [https://acvr.org/dashboard/resources/acvr-di-examination/](https://acvr.org/dashboard/resources/acvr-di-examination/)**

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**Changes to the Residency Program**

The Residency Director is responsible for notifying ACVR DI-RSEC in advance of any planned changes to the program and within 30 days of unplanned changes. Failure to notify RSEC/ACVR may result in placement of the program on probation or suspension.

Changes that must be reported include, but are not limited to:

- Decrease in number of training diplomates in the program below the minimum requirement or below the requirement for the current number of residents in the program.
- Change in program director (i.e. program director leave, retires, or decreases clinical duties/resident oversight below the minimum requirement).
- Change in institution or location.
- Change in affiliate agreement(s)
- Change in supporting non-ACVR faculty/training diplomates.

If the changes result in the program no longer meeting the essential requirements, the program will be placed on probation with a 6 month grace period to address the deficiencies. The remaining training Diplomate(s) must provide at least 90% of the resident supervision during this time period. Within 2 months of their program being placed on probation, the Residency Director will submit a written proposal to address the deficiencies to RSEC,
which will be reviewed with feedback from RSEC. If the deficiencies are not corrected by the end of the 6 month grace period, the program is suspended.

A residency program that is on probation can continue training its current residents, but cannot begin training any new residents. A residency program in suspension cannot continue training ANY residents (existing or new). Residents who have matched to a program but have not yet begun training at the time of a program’s probation or suspension are considered NEW residents and may NOT begin training. The Residency Director is required to notify all new residents matched to the program within 15 days if the program status changes (i.e. from approved to probation or suspension).

A plan for continuation of the training for any remaining residents in a suspended program must be generated and submitted to DI-RSEC within 30 days of receiving the suspension notification.

If the number of training diplomates in the program decreases below the minimum requirements, options include:

1. Hire additional training diplomates to work at the primary institution within the 6 month grace period, with the remaining training diplomate(s) taking full responsibility for resident clinical supervision during this time, with or without additional locum/remote radiologists support
   a. This option includes collaboration with remote teleradiologists to cover deficiencies in resident supervision, which usually requires a formalized affiliate agreement.

2. Remote training diplomates (not located on-site at the primary institution) cannot count towards the Supervising Diplomate:Resident ratio. Transfer any residents remaining in the program to another approved residency program (see Resident Transfers for additional information).

3. Submit an application for an alternative / amended residency program, with collaboration with another residency program or institution.

Residency Program Probation or Suspension

The RSEC will review each program application (new and renewal), annual update, and any other notification of programmatic changes to identify deficiencies. In many cases, minor deficiencies can be resolved quickly before probation or suspension are deemed necessary; however, if significant deficiencies are identified and/or if minor deficiencies cannot be resolved within a specified deadline, RSEC will notify the Residency Program Director regarding program probation or suspension via email. Probation:

A residency program may be placed in probation for the following reasons:

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Residency programs on probation cannot begin training NEW residents, but can continue to train those residents already in-training. Suspended programs cannot begin or continue training ANY residents.

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• The Program Director fails to submit annual update forms, 3-year program applications, resident biannual assessments, and/or resident registration by 3 months after the corresponding deadlines.
• The Program Director fails to respond to notification or inquiry by the RSEC regarding deficiencies on a renewal application, annual update, or resident assessment.
• The Program Director fails to notify RSEC of changes in the program, including its affiliate agreements, within the deadline.
• The Program fails to provide adequate supervision of the residents.
• The Program fails to provide sufficient case or modality experience.
• The number of Supervising Diplomates in the program decreases below the minimum requirements.
• The requirements of the program are no longer being met (e.g. KCC or other educational events are no longer being performed, loss of equipment, loss or change of facilities, etc.)
• Submission of fraudulent information on the residency program application.

A residency program in probation may continue training current residents; however, new residents cannot begin training in a program that is on probation. New residents that have matched with the program but have not yet begun training cannot begin training in a program that is on probation.

Suspension:
A residency program may be suspended for the following reasons:

• Significant deficiencies in the residency program requirements are found.
• There is failure to resolve deficiencies in the program during a probationary period.
• Submission of fraudulent information on the residency program application.

A residency program in suspension cannot continue training residents. A plan for continuation of the remaining residents’ training must be generated within 30 days of receiving the suspension notification and submitted to RSEC.

Monitoring Program Compliance
RSEC will be monitoring program compliance using the following methods:
1. Annual program updates
2. Program renewal applications every 3 years
3. Resident survey at the completion of the residency program and 3 years later.
4. Directed requests for additional program information
   a. If RSEC receives complaints or concerns about a residency program’s compliance with residency requirements, additional information may be requested by the RSEC Chair from the Residency Program Director as needed.
5. ACVR Board Examination pass rate
a. Repeated failure of the exam by residents within a given program may warrant re-evaluation of a program.

b. On such occasions, RSEC may require the Residency Director to provide a detailed plan to supplement resident board preparation.

**Resident Transfers**

A resident may need to transfer to another approved residency program for the following reasons:

1. The original program was placed on probation or suspension.
2. Personnel disputes.
3. Personal issues, location, etc.
4. The resident is terminated from a program.

**Requirements for transfers:**

1. A letter from the original institution must be written and submitted to RSEC at least **4 weeks prior to a scheduled transfer**. This letter must contain: name of the resident, year of resident training, date of departure, amount (weeks) of clinical time and nonclinical time completed at the original institution, an estimated or absolute number of cases the resident has imaged in each required modality, plan for continued financial support of resident, and signature of the resident and original program director.
   a. If the resident was terminated from a program, the residency director must send a letter (via mail email) to the RSEC Chair. This letter must contain the resident’s name, year of training, date of termination, amount (weeks) of clinical time and nonclinical time completed at the institution, reason for termination and signature of the residency director. This letter must be received within **2 weeks** of the date of termination.

2. A letter from the receiving/transfer institution must be written and submitted to RSEC at least **4 weeks prior to the scheduled transfer**. This letter must contain name of the resident, start date, plan for continued financial support of resident, estimated date of residency completion, and signature of the receiving resident director. In addition:
   a. The residency director at the transfer institution must indicate how the transferring resident’s training at the receiving institution will satisfy board eligibility requirements. It may be necessary for an alternative program application be submitted and approved for the transferring individual.
   b. The residency director at the transfer institution must also confirm that the commitment to train a new resident will NOT:
      i. negatively impact the training of any residents currently training at the institution
ii. increase the resident number at the transfer institution beyond what is acceptable based on the number of training diplomates on-site

Transfer letters must be submitted via email to the RSEC Chair at least 4 weeks prior to the scheduled transfer.

RSEC will review all transfer requests within 2 weeks of receipt of both letters. RSEC will provide the Executive Council with a recommendation on approval or refusal of the transfer. The initial and receiving residency directors and the transferring resident will receive notification of the decision by the RSEC and Executive Council.

Appeals
According to Article VIII of the ACVR Constitution, the program and/or individual can appeal the denial of approval of a residency program or other adverse decision by the ACVR. The grounds for reconsideration or review of the decision and guidelines for petition of the reconsideration can be found in the ACVR Constitution. Additionally, the Executive Director of the ACVR may be contacted if additional questions arise or for further information.

Residency Program Questions or Concerns
Anyone, including but not limited to the Residency Director, Supervising Diplomates, Supporting Diplomates and/or residents, with any concerns or questions regarding residency program approval, requirements, the application process, or compliance should contact the RSEC Chair or Assistant Chair. Issues that cannot be resolved by RSEC will be forwarded to the ACVR Executive Director, ACVR President and/or ACVR Executive Council for further assistance. The contact information for these offices can be found on the ACVR website at https://acvr.org/dashboard/resources/administration-and-committees/
Summary Highlights:

ACVR Residency Director Responsibilities:
- Must be ACVR diplomates in good standing
- Must supervise and be actively involved in the training program in veterinary radiology
- Must be on clinics duty with resident oversight at least 50% (i.e. 24 weeks per year) of the time to ensure adequate supervision and direction
- Must report to RSEC Chair in advance of planned changes in personnel, facilities, affiliation agreements, or program, and within 30 days for unplanned changes
- Provide DI-RSEC with semi-annual assessments for each resident every January 31 and July 31
- Provide DI-RSEC with an update form annually by January 31
- Provide DI-RSEC with a re-accreditation application every 3 years by January 31

ACVR Residency Program Requirements:
At least 2 Supervising Diplomates (2 ACVR diplomates or 1 ACVR/1 ECVDI)
Residents must have access (either on-site or remotely) to a Supervising or Supporting Diplomate at all times during business hours and during after-hours on call duty (if applicable). Number of residents cannot exceed a ratio of 2 residents:1 on-site Supervising Diplomate
Programs must provide for each resident to meet case modality minimums including hands-on, supervised ultrasound scanning, and opportunities for image acquisition and protocol setup.
Residents must have access to a medical library including literature and resources necessary for boards preparation.
Each resident must present at least 3 formal lectures during the residency
At least 12 KCC must be performed annually
Educational events (e.g. journal/textbook club, topic rounds, MM Round) must occur a minimum of twice a month

ACVR DI-RSEC Responsibilities:
Review and communicate with Residency Directors regarding new residency program applications, 3-year renewal applications, and annual updates
Review resident bi-annual evaluations and use these to approve resident candidate clinical training with respect to board exam eligibility
Recommend updates to the Diagnostic Imaging Residency Program Essential Training Standards and Requirements document as needed.