



RESIDENCY TRAINING PROGRAM REGISTRATION
2018-2019
NEUROLOGY

Part One

New applications for ACVIM Residency Training Programs must be received by the Residency Training Committee 90 days prior to any residents beginning training. Before completing this form, please review the general and specific requirements for Neurology Residency Training Programs in the ACVIM Certification Manual (CM). The most current version of the CM is available on the ACVIM website at www.ACVIM.org. If there is a discrepancy between this form and the CM, the CM will be considered correct, however, please contact the ACVIM office or the Residency Training Committee Chairperson for clarification.

Prior to making significant changes in a Residency Training Program, approval of the ACVIM and Neurology Residency Training Committee must be obtained. The Candidate and/or Program Director must notify ACVIM, in writing. Significant changes could include, but are not limited to: changes in Program Director or advisors, transferring from one program to another, alterations in program duration, locations of secondary site training, switching to a 'dual board' program, or enrolling in an institutional graduate program.

Notice: This form contains questions for three separate purposes; data collection that ACVIM must maintain for its accreditation as a specialty college; data collection for each specialty to evaluate what is appropriate for residency programs; and data collection to evaluate this Residency Training Program for renewal. It is important that all questions be answered accurately and completely, even if the answer to a specific question is not essential for a program's renewal.

For multi-site residency programs: To ensure uniformity of training and compliance with current CM requirements, training programs that include multiple sites must provide detailed information regarding supervision and facilities available at each specific site(s). Multi-site programs, if any, are listed in Part Two.

Program Director Name :

(Must be a Diplomate of ACVIM in the Specialty of Neurology or an approved Diplomate of the European College of Veterinary Neurology)

Program Director's Contact Information:

Work Phone:	<input type="text" value="(704) 815-3939"/>
E-mail:	<input type="text" value="rbergman@carolinavet.com"/>
Mailing Address:	<input type="text" value="4099 Campus Ridge Road
Matthews, NC 28104"/>

1. Location of Sponsoring Institution (Primary Site of Training Program):

Primary Site and Length of Program:

Multi-site programs, if any, are listed in Part Two.

2. Resident Advisor(s): Must be a Diplomate of ACVIM in the Specialty of Neurology or a Diplomate of ECVN.

Robert Bergman Russell Quigley

3. Supervising Diplomates in Neurology: Must be a Diplomate of ACVIM in the Specialty of Neurology or a Diplomate of ECVN.

[Robert Bergman - Neurology](#)
[Russell Quigley - Neurology](#)

4. All Diplomates of ACVIM or ECVIM responsible for supervision of clinical training who are specialists in areas other than Neurology.

[None Listed](#)

5. Residents currently participating in your training program, along with the beginning date of the program, expected ending date of the program, and designated Resident Advisor.

Resident Name, Dates of Program, (Resident Advisor)
Jessica Reese 7.15.2016 - 7.14.19 (Bob Bergman/Russel Quigley)
Marie Dantio 7.15.2016 - 7.14.2019 (Bob Bergman/Russel Quigley)

Please note, any Program Director or Candidate that significantly changes or alters their Residency Training Program before completion must notify ACVIM, in writing, before the changes are made to ensure that the proposed changes are approved.

Significant changes could include, but are not limited to:

- transferring from one program to another
- alterations in program duration
- switching to a 'dual board' program
- enrolling in an institutional graduate program
- change of Program Director or Resident Advisor



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Part Two

Part Two of the Neurology Residency Training renewal process addresses general features of the program that apply to all current residents. These questions will be used to provide the Residency Training Committee with information needed to judge the structure, quality, scope, and consistency of training provided.

Current Date: 2/06/18

Program Director Name: Robert L. Bergman

(Must be a Diplomate of ACVIM in the Specialty of Neurology or an approved Diplomate of the European College of Veterinary Neurology)

Name of Sponsoring Institution (Residency Training Program): Carolina Veterinary Specialists

1. For multi-site residency programs: To ensure uniformity of training and compliance with current Certification Manual (CM) requirements, training programs that include multiple sites must provide detailed information regarding supervision and facilities available at each specific site(s).

Secondary Site/Outside Rotations (if applicable):

(Please include the following for each site: Supervising Diplomate (ACVIM or other specialty), amount of time scheduled at the site and training requirements to be met.

University of Missouri, College of Veterinary Medicine; 1600 Rollins Road, Columbia, MO 65211
Gayle C. Johnson, DVM, PhD; DACVP 80 hours (2 weeks) neuropathology/surgical neuropathology
The Ohio State University, College of Veterinary Medicine, 1149 Veterinary Medical Center, 601 Vernon L Tharp Street, Columbus, OH 43210 Eric M. Green, DACVR (Radiation Oncology and Radiology); 80 hours (2 weeks) imaging (radiology, CT, MRI) x

2. Length of Training Program:

Yes
2 years
3 years
Other -provide details

3. Advanced Degree:

Masters: Yes No Optional

PhD:

Briefly explain how the degree is integrated into the residency program:

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4. Please list all ACVIM Supervising **Diplomates** (Cardiology, Large Animal Internal Medicine, Neurology, Oncology, Small Animal Internal Medicine, ECVIM, or ECVN Diplomates) providing supervision off-site and explain the situation and the agreements provided for contact with the resident. (Note, in Part One, current ACVIM Supervising Diplomates are included; and you are requested to provide additional comments for off-site supervision here).

Name of Diplomat(e)s	Comments
N/A	

5. Please list all **Diplomates** of the American College of Veterinary Pathology or the European College of Veterinary Pathologists in the areas of clinical pathology or gross/histopathology associated with residency training. If off-site, please explain the situation, and the method of providing direct contact with the resident.

Name of Diplomat(e)s	Clinical or Gross	Comments
Gayle C. Johnson, DVM, PhD	Gross	Resident will spend two weeks with Dr. Johnson for direct work in gross/histopathology

6. Please list all **Diplomates** of the American College of Veterinary Radiology or the European College of Veterinary Diagnostic Imaging associated with residency training. If off-site, please explain the situation, and the arrangements for direct contact with the resident.

Name of Diplomat(e)s	Comments
Eric M. Green, DVM	Resident spent two weeks with Dr. Green for direct work in imaging.

7. Please list all **Diplomates** available for consultation in the areas of dermatology, surgery, ophthalmology, anesthesiology, emergency/critical care, clinical nutrition, clinical pharmacology, behavior, and/or theriogenology. If off-site, please explain the situation and the arrangements provided for contact with the resident.

Name of Diplomat(e)s	Specialty	Comments
Michelle Nanfelt, Sean Gallivan Claudia McFadden, Shannon Parfit Amy Treadwell, Tina Fife	ACVS ACVIM Oncology ACVO	On Site Surgeons On Site CVS Charlotte Location (10 miles from hospital) provide consultation.

8. Please list the residents who have completed the training program within the last five years, including the year that each individual's training program ended and whether the individual has completed the Board certification process.

Name(s)	Program End Date (mm/dd/yyyy)	Diplomate? (Yes or No)
N/A		

9. Please list the residents currently participating in your training program, along with the beginning date of the program, expected ending date of the program, and designated resident advisor.

Resident Name(s) (first/last)	Length of Program (in years)	Program Start Date (mm/dd/yyyy)	Program End Date (mm/dd/yyyy)	Resident Advisor Name(s)
Jessica Reece Marie Dantio	3	07/15/2016	07/14/2019	Robert Bergman/ Russell Quigley

The following questions will be used to provide the Residency Training Committee with information needed to judge the structure, quality, scope, and consistency of training provided.

NOTE: Direct supervision is required during clinical training, with the time required specified by each particular specialty. Direct supervision is defined as follows: The Supervising Diplomate and resident are participating in a clinical practice in which both the Diplomate and the resident are on duty and interactively and concurrently managing cases. The Diplomate need not personally examine each patient seen by the resident, but must remain physically available for consultation. Please use this definition when responding to the following questions regarding clinical rotations.

10. Is this a traditional or non-traditional residency training program? A traditional neurology residency is a two (2) or three (3) year postgraduate training program, with a minimum of ninety six (96) weeks of supervised clinical training with a majority of the time spent at one location. A non-traditional neurology residency allows for training that may occur in non-contiguous blocks of time over an extended time period.

Traditional	<input checked="" type="checkbox"/>
Non-traditional	<input type="checkbox"/>

For non-traditional programs, please provide a detailed description of the residency program, including length of program, proposed annual schedule, and the amount of time of direct Diplomate supervision for each location of the residency.

11. The ACVIM Neurology Certification Manual (CM) requires that each resident experience 75 weeks (minimum) of clinical Neurology training under the supervision of either a Diplomate of ACVIM in the Specialty of Neurology or a Diplomate of ECVN. **The 75 weeks should include at least 50 weeks of direct supervision (see definition in CM) and the remainder as indirect supervision (indirect supervision is satisfied by the Supervising Diplomate Neurologist being available for face-to-face contact with the resident at least 4 days per week).**

Please provide an outline of planned yearly schedule, including number of weeks of direct and indirect supervision (i.e. in year 1, the resident will be directly supervised for 25 weeks etc.) A table similar to the example below outlining the proposed weekly schedule of duties for the residents should be provided:

EXAMPLE TABLE ONLY:

	Year I	Year II	Year III
Medical Neurology *			
Neurosurgery			
Neurology/Neurosurgery Direct Supervision	36	36	
Neurology/Neurosurgery - Indirect Supervision			34
Internal Medicine	4	2	2

Clinical Pathology	2		
Radiology	2		
Neuropathology		2	2
Other Rotation (please list the name of each rotation)			
		1	
	2	4	4
Research	4	5	8
Independent Study			
Vacation	2	2	2
Total	52	52	52

Numbers indicated are in “weeks”.

* Many residencies are a combined neurology / neurosurgery program with no distinct separation between the services. Some programs, however, have separate training with a surgery service and this example includes that possibility in describing the weekly rotations.

The example table is only a listing of a proposed weekly schedule for each of the three years of a typical 3-year residency program, including all that is required by ACVIM without making any specific recommendations.

Please indicate the outline of planned yearly schedule here:

	Year I	Year II	Year III
Medical Neurology *			
Neurosurgery			
Neurology/Neurosurgery - Direct Supervision	40	36	6
Neurology/Neurosurgery - Indirect Supervision			35
Internal Medicine	6	4	
Clinical Pathology		2	
Radiology	2		
Neuropathology	0.5	0.5	0.5
Other Rotation (please list the name of each rotation):			
Other: Neuroscience course	0		2
Other: ACVIM Forum	0.5	0.5	0.5
Research	2	2	2
Independent Study		6	4
Vacation	2	2	2
Total *	52	52	52

*The totals should add up to 52 weeks.

12. Describe how daily clinical case rounds are conducted and supervised:

Residents will meet with supervising neurologist every morning at 8 am (5 days a week) and then on weekends to discuss each hospitalized cases as well as case transfers. Patient neurological examinations/assessments will be done by the neurology resident and the supervising diplomate. During daily receiving each case will be discussed between the resident and supervising diplomate. Rounds will be done briefly at the end of the work day with the resident and supervising diplomate

13. The neurology specialty requires that the resident spend at least 50 hours during the residency in the following rotations: Radiology, Clinical Pathology, Neuropathology and Neurosurgery. A Training Agreement Form must be completed and signed by the Diplomate supervising the required training, regardless of whether the training occurs on site or off-site. **Please use the standardized “Training Agreement Form” found on the ACVIM website (www.ACVIM.org) to document proof of supervision for all required contact hours (clinical pathology, radiology, neuropathology surgery, etc.) in rotations other than neurology.** 1 Training Agreement form is required per rotation per resident at the beginning of the residency. Forms do not need to be resubmitted each year as long as a valid Training Agreement Form is on file.

In addition, please provide a brief description of how each phase of this required training is accomplished.

Radiology: 50 hours with a Board-certified radiologist interpreting radiographs, attending seminars and participating in and evaluating the results of special radiographic procedures.

The resident will spend 2 weeks with Dr. Green on the clinical radiology service at The Ohio State University reviewing radiographs, myelograms, large animal radiography, CT, and MRI. The resident will be expected to learn proper terminology and be able to write accurate diagnostic imaging reports.

Clinical Pathology: 50 hours with a Board-certified pathologist or clinical pathologist evaluating clinical pathologic findings, attending clinicopathologic conferences, and examining surgical sections.

The resident will spend 2 weeks with Dr. Johnson on the pathology service at the University of Missouri reviewing clinical neuropathology specimens as well as learning staining techniques and tissue markers. The resident will be expected to properly describe neuropathologic findings as well as normal histopathology.

Neuropathology: 50 hours devoted to review of veterinary neuropathology. This time may be spent in lecture series, seminars, or a formal training program recognized and approved by the college.

Neuropathology will consist of formal rounds with the residents, 20 hours each of the first 2 years for part of journal club reviewing normal histology, specific stains, and pathologic specimens. The residents will also spend 2 weeks with a veterinary pathologist.

Neurosurgery: 50 hours participating in veterinary neurosurgical procedures. Please provide a specific description of the type of participation [i.e. observation, performance of neurosurgery], and credentials of those providing the training [i.e. ACVS vs. ACVIM Neurology]. A Training Agreement Form must be completed if this training is provided by individuals other than the ACVIM (Neurology) or ECVN supervising Diplomate for the residency training program.

The resident will be required to assist or act as primary surgeon for neurosurgical procedures done on their cases as well as cases taken in by the supervising diplomate. The resident will be supervised by Robert Bergman (DACVIM) and Russell Quigley (DACVIM). There are about 500 neurosurgical procedures done at the hospital yearly

14. The neurology specialty requires that the resident be able to perform and interpret current electrodiagnostic procedures. Briefly state how the concepts of electrodiagnostics (including EEG) and their clinical application will be

taught to residents during the training program. Specifically state whether or not the resident will have hands-on electrodiagnostics experience:

The resident will be expected to perform and interpret EMG, MNCV, SNCV, Cord Dorsum Potentials, Repetitive Stimulation on clinical patients. Direct access to EEG is not available however previous EEG tracings as well as the theory and practice of EEG will be discussed in electrodiagnostic rounds.

15. The college requires that the resident spend a minimum of 80 hours involved in routine and regular participation in a critical review of the literature (e.g. journal club) during the residency training program. Please explain how this requirement is met:

A minimum of 2 hours each week will be devoted to formal neurology journal club with the Neurology Diplomates. This will include review of current literature as it pertains to neurology and neurosurgery, as well as teaching/review of neuroanatomy, neurophysiology, neuropathology, electrodiagnostics, and imaging. Current literature will also be reviewed as the residents evaluate clinical cases.

16. The neurology specialty requires that the advisor meet with the resident at 6 month intervals to assess, review and critique the resident's progress and weekly schedule of activities. Please explain how this is accomplished:

The supervising diplomate and the resident will meet on a quarterly basis for a formal review of the residents progress, case logs, resident project, and ongoing education as it pertains to the specialty.

17. The neurology specialty requires that the resident complete a significant research or clinical investigative project. Please describe how you plan for the resident to undertake, monitor, and complete a project. Include a timeline that the resident and mentor will use as a guide for completion of the project. Note that publication of this research project is not a requirement.

The resident and supervising diplomate will identify a clinically based research project within the first 3 months of the residency. The specific goal of the project, the study design, and the endpoint of the project will be determined by this time. The project will be intended to be submitted to a peer reviewed journal for publication. Progress on the project will be monitored on a quarterly basis with the supervising diplomate. The project should be completed by no later than the 30th month of the residency.

18. Please indicate the availability of the following facilities or equipment. Indicate if these are available at the primary training site, or at a different location. (In the Location column, indicate on-site for primary location or the name of the facility where the equipment is located if off-site.) For facilities that are not on-site, please describe the situation and availability in the space at the end of this section. Please also provide the manufacturer and model of the unit for electrodiagnostic and imaging equipment.

	Available?		Location of equipment?
	Yes	No	(On-site or list site name)
a) Standard radiological equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
b) Ultrasonographic equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
c) Clinical Pathology capabilities: (includes CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology, and endocrinology)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site

d) Electrocardiography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
e) Blood Pressure Measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
f) Radiation Therapy Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
g) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Online
h) Computerized Medical Records w/Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
i) Medical Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Online
j) Electromyography and nerve conduction velocity testing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
k) Evoked Response Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site
l) Electroencephalography	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Located CVS Winston Salem
m) Computed Tomography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site 4 slice helical
n) Magnetic Resonance Imaging (include field strength)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.5 Tesla

If any of the above equipment or facilities is available off-site, please explain how the resident can access them for case management, research, or study, *especially with respect to the use of imaging equipment*:

N/A

19. Describe the formal conferences, such as clinicopathologic conferences, journal clubs, or seminars that are held on a regular basis. Please provide a description and the typical schedule for these:

Daily hospital case rounds with emphasis on relevant literature. Biweekly 1 hour journal clubs to incorporate textbook/topic review, current literature as well as clinical techniques (neurosurgery, electrodiagnostics)

20. Detail the teaching responsibilities expected of the resident during the training program. This may include lectures in departmental courses for veterinary students, grand rounds presentations, presentation of papers or seminars at conferences, or participation in continuing education programs.

The residents will be responsible for 2 one hour topic rounds with interns each year. They will also be required to give a 1 hour lecture to local veterinarians as part of the CE offered by Carolina Veterinary Specialists

21. How many major veterinary medical or medical meetings are each resident able to or expected to attend during his/her training program?

None One Two > Two

Comments: ACVIM, Neuroscience Course, Local CE

22. Are one or more publications required as part of the training program?

Yes No Number

Comments: 1 original research project or case series and 1 review article or case report.

23. Please describe any additional pertinent information that the Residency Training Program should consider in its evaluation of this Training Program.

The hospital where the training will take place has a very busy and diverse medical and surgical neurology caseload. An average of 15-20 new cases are seen each week. The residents will not be expected to take primary case responsibility for all of these cases but will have exposure to them. Also the program director has been an active participant in ACVIM and AO Vet. Dr. Bergman just finished a 5 year term on the neurology certifying exam committee, is currently a member of the ACVIM neurosurgery training committee, and a member of the AO Vet Spine faculty. The program director also has previously trained neurology residents. The supervising diplomates have extensive experience in veterinary neurology and neurosurgery.

Please note, any Program Director or Candidate that significantly changes or alters this Residency Training Program before completion must notify ACVIM, in writing, before the changes are made to ensure that the proposed changes are approved.

Significant changes could include, but are not limited to:

- transferring from one program to another
- alterations in program duration
- switching to a 'dual board' program
- enrolling in an institutional graduate program
- change of Program Director or Resident Advisor

I verify that the above information is an accurate reflection of this Residency Training Program.

Per the Certification Manual, each year, the Program Director (PD) must certify to the RTC/ RTCC and ACVIM, in writing, that they have read the ACVIM Certification Manual and understands their role in residency training.

Checking this box is an indication I have read the ACVIM Certification Manual and understand my role in the Residency Training Program.