

Part One

New applications for ACVIM Residency Training Programs must be received by the Residency Training Committee (RTC) 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 current version of the CM is available on the ACVIM website at [www.ACVIM.org](http://www.ACVIM.org).

Prior to making significant changes in a Residency Training Program, approval of the ACVIM and Neurology RTC must be obtained. The Candidate and/or Program Director 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 the following: 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:** The data collected in this form is necessary both for the ACVIM to maintain its accreditation as a Registered Veterinary Specialty Organization and also is required for renewal of the residency training program. Some of the data collected is required of every specialty and some is specific to the specialty of Neurology.

**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, will be addressed by the Program Director 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 (ECVN) for at least 5 years with 3 years' experience training residents

Program Director Contact Information:

Work Phone:	<input type="text" value="(248) 516-1122"/>
E-mail:	<input type="text" value="drisaacs@me.com"/>
Mailing Address:	<input type="text" value="33300 W 9 Mile Road Farmington, MI 48336"/>

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

Primary Site Location:	Length of Training Program:
<input type="text" value="Dogwood Veterinary Referral Ctr"/>	<input type="text" value="4 year"/>

2. Resident Advisor(s): Must be a Diplomate of ACVIM in the Specialty of Neurology or a Diplomate of the ECVN and boarded for at least one year. Each RA advises and supervises no more than two residents at one time.

3. Supervising Diplomates: Must be a Diplomate of ACVIM in the Specialty of Neurology or a Diplomate of the ECVN. The supervising diplomate must be active in the practice of the specialty and must maintain clinical competency in the field. **The sponsoring institution must provide resident with onsite presence of any combination of at least two ACVIM or ECVN Neurology Diplomates with full-time clinical responsibilities.**

Matthew Holan - Neurology

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

Name and Specialty	Comments

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	Start date (mm/dd/yyyy)	End Date (mm/dd/yyyy)	Resident Advisor Name*
Logan Dolansdon	7/22/16	7/21/20	Andrew Isaacs
Roberto Palma	7/30/18	7/29/22	Andrew Isaacs



RESIDENCY TRAINING PROGRAM REGISTRATION  
2019-2020  
NEUROLOGY

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:

Program Director Name:

Program Director Email Address:

Must be a Diplomate of ACVIM in the Specialty of Neurology or an approved Diplomate of the European College of Veterinary Neurology (ECVN) for at least 5 years with 3 years' experience training residents

Name of Sponsoring Institution (Primary Site):

1. Length of Training Program:

	Yes
2 years	<input type="checkbox"/>
3 years	<input type="checkbox"/>

Other -provide details

2. Advanced Degree:

	Yes	No	Optional
Masters:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
PhD:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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

Name of Diplomate(s)	Specialty Certifying Body	Comments
Steve Carey	ACVIM	Off-site, direct supervision internal medicine rotation at Michigan State University College of Veterinary Medicine
Kate Holan	ACVIM	Off-site, direct supervision internal medicine rotation at Michigan State University College of Veterinary Medicine

John Kruger	ACVIM	Off-site, direct supervision internal medicine rotation at Michigan State University College of Veterinary Medicine
Daniel Langlois	ACVIM	Off-site, direct supervision internal medicine rotation at Michigan State University College of Veterinary Medicine
Jeffery Dennis	ACVIM	Off-site, direct supervision internal medicine rotation at Blue Pearl Veterinary Partners, Overland Park, KS
Heather Vaske	ACVIM	Off-site, direct supervision internal medicine rotation at Blue Pearl Veterinary Partners, Overland Park, KS

4. 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	Specialty Certifying Body (ACVP or ECVP)	Clinical or Gross	Comments
Peter Christopherson	ACVP	Clinical	Off-site, clinical pathology rotation at Auburn University College of Veterinary Medicine
Jon Patterson	ACVP	Gross	Off-site, neuropathology rotation at Michigan State University College of Veterinary Medicine

5. 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	Specialty Certifying Body (ACVR or ECVDI)	Comments
John Hathcock	ACVR	Off-site, 3 week rotation at Auburn University College of Veterinary Medicine. Also available for consultations remotely.

6. 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 Certifying Body	Comments
Annette Petersen	ACVD	Michigan State University College of Veterinary Medicine faculty available for consultation
Edmund Rosser	ACVD	Michigan State University College of Veterinary Medicine faculty available for consultation
Loic Dejardin	ACVS	Michigan State University College of Veterinary Medicine faculty available for consultation
Bryden Stanley	ACVS	Michigan State University College of Veterinary Medicine faculty available for consultation
Simon Petersen-Jones	ACVO	Michigan State University College of Veterinary Medicine faculty available for consultation
Andras Komaromy	ACVO	Michigan State University College of Veterinary Medicine faculty available for consultation
Matthew Beal	ACVECC	Michigan State University College of Veterinary Medicine faculty available for consultation

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.

7. 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 type="checkbox"/>
Non-traditional	<input checked="" 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. The resident must complete the residency in blocks of time no less than four weeks in length and attend a minimum of 20 weeks of training per year. The training period may not exceed a total of five years.

4 years: The program is the equivalent of a three year program, but divided over four years (nine months on and three months off per year). See attached planned yearly schedule (N-DVRC-19, Yearly Breakdown).

8. 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			
Neurology/Neurosurgery - Indirect Supervision			
Internal Medicine			
Clinical Pathology			
Radiology			
Neuropathology			
Other Rotation (please list the name of each rotation):			
Other:			
Other:			
Research			
Independent Study			
Vacation			
<b>Total **</b>			

\* 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.

\*\*The totals should add up to 52 weeks.

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

Morning: Resident and supervising diplomate meet to discuss patients and daily plan between 8 and 9 AM

Evening: Resident and supervising diplomate meet to discuss daily events, patients, and plan for following day

10. The neurology specialty requires that the resident spend at least 50 hours during the residency in the following rotations: Imaging, Clinical Pathology, Neuropathology, Electrodiagnostics and Neurosurgery as well as participate in emergency duties on a rotational

basis. A training hour (see CM 7.C.7) will be defined as a minimum of one (1) continuous hour of direct contact time with a supervising specialist in the other field. 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](http://www.ACVIM.org)) to document proof of supervision for all required contact hours (imaging, clinical pathology, neuropathology, electrodiagnostics and neurosurgery) in rotations other than neurology.** One 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.

Imaging: 50 hours with a Board-certified radiologist interpreting images, learning and evaluating the results of special imaging techniques and attending imaging rounds or seminars.

Formal 3-week rotation at Auburn University College of Veterinary Medicine focusing on banked neuroradiology cases. When on the neurology blocks the resident will also review the previous week's cases with an ACVR diplomate. There will be an oral evaluation at the end of the 3-week rotation.

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

Formal 2-week rotation at Auburn University College of Veterinary Medicine focusing on clinical pathology with review and interpretation of hematology, urinalysis, and clinical chemistry data, cytologic samples, blood smears, and bone marrow aspirates. The resident will participate in weekly clinical pathology rounds and journal club discussions. Most of the instruction is one-on-one, resident and pathologist, often with the use of a dual or multi-headed microscope. There will be an oral and/or written evaluation at the end of the 2-week rotation.

Neuropathology: 50 hours with a board-certified anatomic pathologist devoted to review of veterinary neuropathology. This time may be spent in lecture series, seminars, or a formal training program approved by the Residency Training Committee.

Lectures on "Gross Examination of the Nervous System" and "Cellular Response to Injury in the Nervous System"; review of histopathology slide set (45 cases), with accompanying gross lesions; review of full cases which include history, imaging studies, gross pathology, and histopathology. Trainee will work independently on slide sets and full cases before review with Dr. Patterson.

Electrodiagnostics: 50 hours devoted to reviewing, evaluating, and interpreting different aspects of electrodiagnostics; including but not limited to, electroencephalography, electromyography, motor and sensory nerve conduction study and evoked potentials. 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 electrodiagnostic experience.

The resident participates with hands on electrodiagnostic testing performed on clinical patients, with supervision by the following diplomates ACVIM (Neurology): Andrew Isaacs, Jared Galle, and Matt Holahan. The concepts and clinical applications of electrodiagnostics, including EEG, are reviewed, evaluated, and interpreted during quarterly electrodiagnostic rounds (3 hours every quarter x 4 years = 48 hours) and some journal club sessions (2+ hours over 4 years) for a total of 50 hours.

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/ECVN]. 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.

Neurosurgery experience will be through neurology/neurosurgery blocks at Dogwood Veterinary Referral Center. The resident scrubs in on the majority of surgeries. They start by assisting, and then progress into performing the approach and closure, then most of the surgery, and eventually the entire surgery with assistance only when requested. Supervision is by the following diplomates ACVIM (Neurology): Andrew Isaacs, Jared Galle, and Matt Holahan.

Emergency Duty: Participation in emergency service on a rotational basis; cases seen may be limited to neurology. Please provide a specific description of the type of participation.

The clinic is open, Monday through Saturday, for scheduled neurology/neurosurgery consultations. Residents are assigned, on a rotating basis, emergency neurology/neurosurgery coverage for these nights. On Sundays the residents, on a rotating basis, are responsible for providing emergency neurology/neurosurgery coverage. At all times the residents are supported by one of the supervising diplomates ACVIM (Neurology): Andrew Isaacs, Jared Galle, or Matt Holahan.

11. The neurology specialty 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 with at least one board-certified neurologist in attendance at each journal club meeting. Please explain how this requirement is met:

Neurology journal club is held weekly. Articles are also reviewed regularly regarding patients managed in the hospital.

12. 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. The advisor must provide written documentation of the review that will be signed by both advisor and resident. Please explain how this is accomplished:

Meetings with the resident are held every 6 months to review performance and ensure important deadlines pertaining to completion of the residency are met.

13. The neurology specialty requires that the resident must complete a basic science or clinical research project that follows the scientific method approach and receives approval by the resident advisor (review CM section 7.E.5.c). 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 selects the research project topic within the first 6 months of the residency. By the end of year 1 the resident has performed a literature search and clarified the research question. This is presented/reviewed/approved by the advisor by the middle of year 2. By the end of year 2 the resident has completed the research design and is ready to initiate data collection. By the end of year 3 the resident has completed all data collection and is ready to start data analysis. By the end of year 4 the research is formally presented in lecture and written form.

14. 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 Quattro DR
b) Ultrasonographic equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site Edan DUS60
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 and Off-site reference labs (Idexx, MSU, Comp. neuromusc lab, etc.)
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"/>	Animal Cancer & Imaging Center, Canton MI
g) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Michigan State University



- h) Computerized Medical Records w/Searching Capabilities
- i) Medical Library w/Literature Searching Capabilities
- j) Electromyography and nerve conduction study testing
- k) Evoked Response Equipment
- l) Electroencephalography
- m) Computed Tomography
- n) Magnetic Resonance Imaging (include field strength)

<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Michigan State University
<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site Cadwell Sierra LT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site Cadwell Sierra LT
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Michigan State University
<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site Epica Vimago
<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site (.25T Esote-Grande)

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 and electrodiagnostic equipment*:

Arrangements are in place for the resident to utilize off site radiation therapy facility located at Animal Cancer & Imaging Center, Canton MI and Michigan State University veterinary and medical library (online access), and EEG.

15. Residents must attend formal teaching conferences, resident seminars, grand rounds sessions, medicine journal clubs, neurobiology classes, etc. Residents must participate in these activities an average of four times per month, regardless of their duty status. Please describe the formal conferences, such as clinicopathologic conferences, journal clubs, or seminars that are held on a regular basis.

Fridays, 7 AM: Neurology journal club - review of current neurology/neurosurgery journal articles.

16. The resident must give a presentation at a formal conference at least once per year. 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. Documentation of these presentations must be included in the neurology credentials packet of the resident.

Resident helps teach students and interns in the hospital. As the resident gains experience, they will lead daily case rounds and topic rounds discussions with the students and interns (includes at least one formal lecture presentation per year). Resident is encouraged to presents CE lectures at conferences in the midwest and present their research at ACVIM Forum.

17. A Neurology Residency Training Program must provide at least 40 hours per year of intensive formal review sessions for residents on topics covered in the General and Specialty Examinations. The requirement could be met in part by attending an ACVIM Advanced Continuing Education (ACE) course, the ACVIM Neuroscience Course (Brain Camp) or an ACVIM Forum. Please describe how these opportunities will be made available to the resident.

Residents are provided the opportunity and financing to attend "Brain Camp" and ACVIM Forum in addition to weekly (Mondays, 7AM) Neurology board review.

18. 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 Forum and "Brain Camp"

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

Yes      No      Number

      

Comments:

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

**Please note: The Program Director must report substantive changes within a Neurology RTP affecting compliance with Specialty of Neurology requirements to the Neurology RTC Chair within 14 days. This must be done in writing through the ACVIM office before the changes are made to ensure they are acceptable to the Neurology RTC.**

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.