

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="(765) 494-1107"/>
E-mail:	<input type="text" value="rbentley@purdue.edu"/>
Mailing Address:	<input type="text" value="Veterinary Clinical Sciences"/>
	<input type="text" value="625 Harrison St."/>
	<input type="text" value="W. Lafayette, IN 47907-2026"/>

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.

R. Timothy Bentley
Stephanie Thomovsky

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

R. Timothy Bentley - Neurology
Stephanie Thomovsky - Neurology
Melissa Lewis - Neurology

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

Larry Adams - SAIM
Carolyn Guptill-Yoran - SAIM
George Moore - SAIM
Nolie Parnell - SAIM
J. Catharine Scott-Moncrieff - SAIM
Sarah Steinbach - SAIM
Janice Sojka Kritchevsky - LAIM
Laurent Couetil - LAIM
Sandra Taylor - LAIM
Daniel Hogan - Cardiology
Henry Green - Cardiology
Deborah Knapp - Oncology
Michael Childress - Oncology
Christopher Fulkerson - Oncology

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)

Lindsey Peterson 7.15.15 - 7.15.18 (Stephanie Thomovsky)
Kelly Cummings 7.15.206 - 7.15.2019 (R. Timothy Bentley)
Sissy (Hsuan-Ping) Hong 7.15.17-7.15.2020 (Stephanie Thomovsky)

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



RESIDENCY TRAINING PROGRAM REGISTRATION
2018-2019
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: 1/19/18

Program Director Name: R. Timothy Bentley

(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): Purdue University

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.

0 - 16 weeks per year at the Animal Neurology & MRI Center (ANC), Michigan.
Neurology rotations under Dr Michael Wolf, DVM, CCRT, Diplomate ACVIM (Neurology) who will be the supervising diplomate for this rotation. Will also rotate under Adam Moeser, DVM, Dipolomate ACVIM (Neurology) and Trevor Moore, DVM, Diplomate ACVIM (Neurology).
Rotations will include medical and surgical neurology. The training requirements to be met are primarily weeks of directly supervised neurology. Addiitonally, neurosurgery hours will be accumulated. As described further in question 4 below, resident rounds, journal club and neuropathology rounds at Purude will still be attended during these weeks, via teleconferencing.
Currently, Dr Cummings (second year resident) will be doing 16 weeks at the ANC this academic year, whereas our other two residents will not be rotating through the ANC.

2. Length of Training Program:

2 years []
3 years [x]

Other -provide details

3. Advanced Degree:

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

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

Enrolling in an advanced degree is mandatory, unless residents already have such a degree. Although residents choose between MS and PhD, all current residents are enrolled in MS. The MS coursework and classes are specifically designed by our department to be of use to clinicians and especially clinician-scientists, including classes in clinical trial design, medical statistics, research ethics, etc. Journal club and resident round performance grades contribute to the MS. The annual seminar, one each by every resident, is graded by the neurology faculty and this grade counts towards the MS.

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
Michael Wolf, DVM, CCRT, Diplomat ACVIM (Neurology) Adam Moeser, DVM, Dipolomate ACVIM (Neurology) Trevor Moore, DVM, Diplomat ACVIM (Neurology)	Dr Wolf is the primary mentor at the secondary site, the Animal Neurology Center, Michigan. Only our current second year (Kelly Cummings) does rotations at the ANC; the other neurology residents are based at Purdue only. Kelly is completing her 75 weeks of neurology split between Purdue and the ANC. In addition, she is completing all other rotations and requirements at Purdue (Int Med, Clin Path, Radiology, Neuropath, Soft Tissue, and Orthopedics). She is also completing all her research time at Purdue, under Dr Bentley and a Purdue radiology faculty. She will be at Purdue for her Independent Study (2 nd and 3 rd year board prep). While at the ANC, she video-conferences into Purdue for weekly journal club, for weekly resident rounds and for monthly neuropath rounds

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
Craig Thomson, DACVP Joanne Messick, VMD, PhD, DACVP Alan Rebar, DVM, PhD, DACVP Margaret Miller, DVM, PhD, DACVP Jose Ramos-Vara, DVM, PhD, DECVP Harm HogenEsch, DVM, PhD, DACVP Evelyn Kazacos, DVM, PhD, DACVP Stephen Lenz, DVM, PhD, DACVP Yava Jones-Hall, DVM, PhD, DACVP	Clinical Clinical Clinical Gross Gross Gross / Immunopath Gross Gross Gross	All are on-site

Willie Reed, DVM, PhD, DACVP, DACPV	Gross	
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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 Diplomate(s)	Comments
Hock Gan Heng, DVM, MVS, MS, DECVDI, DACVR Chee Kin Lim, DVM, BVSc, DECVDI	All are on-site
Jean Poulson, DVM, PhD, DACVR	Radiation Oncology

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 Diplomate(s)	Specialty	Comments
Lynetta Freeman, DACVS S. Kathleen Salisbury, DACVS Marije Risselada, DVM, PhD, DACVS, DECVS	Soft tissue surgery Soft tissue surgery Soft tissue surgery	All are on-site
Gert Breur, DACVS Mark Rochat, DACVS Sarah Malek, DACVS	Orthopedic surgery Orthopedic surgery Orthopedic surgery	
Paulo Gomes, DVM, DACVD Jean Stiles, DACVO Wendy Townsend, DACVO	Dermatology Ophthalmology Ophthalmology	
Ann Weil, MS, DVM, DACVAA Jeff Ko, DVM, MS, DACVAA	Anesthesia Anesthesia	
Tokiko Kushiro-Banker, BVM, MS, PhD, DACVAA Aimee Brooks, DVM, MS, DACVECC Elizabeth Thomovsky, DVM, MS, DACVECC	Anesthesia ECC ECC	
Niwako Ogata, BVSc, PhD, DACVB Larry Horstman, DVM, MS, DACT Augustine Peter, BVSc, MVSc, MSc, PhD, DACT	Behavior Theriogenology Theriogenology	
Stephen Adams, DVM, MS, DACVS Timothy Lescun, DVM, MS, DACVS Jan Hawkins, DVM, DACVS A. Nickie Baird, DVM, DACVS	LA Surgery LA Surgery LA Surgery LA Surgery	

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)
Michael Reese	7/15/2013	Yes
Andrea Sangster	7/15/2014	Yes
Chun-Sheng (Jason) Lee	8/22/2014	No
Trevor Moore	7/15/2015	Yes
Talisha Moore	7/15/2016	No
Amy Yanke	7/15/2017	No

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)
Lindsey Peterson	3	7/15/15	7/15/18	Thomovsky
Kelly Cummings	3	7/15/16	7/15/19	Bentley
Sissy (Hsuan-Ping) Hong	3	7/15/17	7/15/20	Thomovsky

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.

NA

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 *	31	29	24
Neurosurgery			
Neurology/Neurosurgery - Direct Supervision	25-31	23-29	18-24
Neurology/Neurosurgery - Indirect Supervision	0-6 (chief resident)	0-6 (chief resident)	0 – 6 weeks serving as the chief resident
Internal Medicine	6		
Clinical Pathology	1.5 week Plus ad hoc CSF and other cytology	ad hoc CSF and other cytology	ad hoc CSF and other cytology
Radiology	1.5 week plus ad hoc imaging with radiologists	ad hoc imaging with radiologists	ad hoc imaging with radiologists
Neuropathology	1 hr/month	1 hr/month	1 hr/month

	plus didactic hours here at Purdue and external courses (ACVIM, Neuroscience course, etc)	plus didactic hours here at Purdue and external courses (ACVIM, Neuroscience course, etc)	plus didactic hours here at Purdue and external courses (ACVIM, Neuroscience course, etc)
Other Rotation (please list the name of each rotation):			
Other: Surgery (Soft Tissue and Orthopedics)	6	6	0 - 6
Other: I U Med School - human neurology or neurosurgery or neuroimaging	0	0	2-3
Research	7	13	13
Independent Study	(combined with research)	4 (board prep)	9 (board prep)
Vacation	4 (required offering by Purdue - taken during Research/Independent study time if desired)	4 (required offering by Purdue - taken during Research/Independent study time if desired)	4 (required offering by Purdue - taken during Research/Independent study time if desired)
Total *	52	52	52

*The totals should add up to 52 weeks.

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

Brief case rounds are conducted each morning during the week to review any updates in case status from overnight and the plans for the patient during the subsequent day. Each evening full case rounds are discussed as a group in which patient history, physical and neurological examination, localization, diagnostic plan/results, and treatment plans are discussed in depth.

Residents conduct topic rounds at the student level 2 to 3 times weekly separate from case rounds.

Further, residents attend rounds which are held informally as needed during the day in which greater case depth, exam findings, and pathophysiology are discussed together at the resident-level among residents and neurologists.

Once weekly a board-preparation level resident rounds are conducted by the neurologists on pre-determined topics throughout the course of the residency.

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.

Each neurology resident will rotate through the Radiology service for part of their 50 hours and receive instruction on image interpretation, and will participate in clinical rounds. In addition, a joint journal club between radiology and neurology is planned for approximately 2 times per year. As part of the weekly Neurology Resident Rounds, several times a year neuro-imaging results from prior cases are reviewed and discussed. Residents are expected to be present during imaging of their clinic cases and to review the imaging results with the radiologists.

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

Each neurology resident will rotate through the Clinical Pathology service for part of their 50 hours and receive instruction on the preparation and interpretation of clinical pathology samples, as well as attend any rounds or journal clubs held during that time. Residents are expected to review the cytology from their clinic cases with the pathologists and pathology residents during the course of their clinic training.

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.

Once monthly neuropathology (histopathology) rounds are held in conjunction with the pathology service, with participation from board certified pathologists. During the first two years of the residency program the histopathologic review will be presented by the pathologists or pathology residents to the remainder of the group. During the final year of the residency program, the neurology resident is responsible for interpreting the pathology independently, and working with the pathologist to verify their interpretation. During this final year, the neurology resident will present the histopathology review of the case during rounds.

Neuropathology rounds are co-hosted by one of the ACVP pathologists on faculty (Margaret Miller), with whom a strong association has been created between our Pathology and Neurology services here at Purdue. We have monthly neuropathology rounds that are very popular with the pathology residents and Neurology residents, in which we review gross pathology and histopathology specimens, and compare to clinical signs, pathophysiology, and imaging findings. In addition, within the graduate coursework at Purdue, occasionally ACVP faculty lecture on the topic of neuropathology. When such sporadic lectures occur, the faculty inform us so that neurology residents can attend. This is not a specific course for residents, but merely a sporadic opportunity (perhaps 2-3 lectures per year, for 1-3 hours each). Topics in the past year included CNS tumors and large animal neuropathology. Additional pathology hours are accumulated through ACVIM offered courses at the annual Forum and ESVN Symposia, as well as the Neuroscience course.

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.

For general surgery experience, each resident will spend 6 weeks on the Soft Tissue Surgery service, and 6 weeks on the Orthopaedic Surgery service working directly with ACVS diplomates during the course of their residency. Neurosurgical procedures will typically be performed by the neurology section under the supervision of ACVIM diplomates, but are occasionally performed under an ACVS Diplomate. The neurosurgical caseload at Purdue

varies, but is 125-140 per year. These most commonly include the surgeries listed below (some of these spinal surgeries were spinal tumors, arachnoid diverticula, and other in addition to IVDD):

Hemilaminectomies

Ventral slots

LS Dorsal laminectomies; LS foraminotomies; LS pedicle screw stabilization

Cervical laminectomies/hemilaminectomies

Vertebral stabilizations (e.g., Wobbler; e.g. vertebral fracture/luxation)

Craniotomies / Craniectomies (transfrontal; rostral tentorial; transtentorial; suboccipital)

Brain biopsies / tumors

AA subluxations

LS foraminotomy

Other

Muscle and/or nerve biopsies are performed on approximately 5-10 cases per year on average.

VP shunts are performed on about 9 research swine per year; residents assist in most of these procedures.

Neurosurgical training will begin with observation/assisting, and gradually move to performance as primary surgeon, with supervision and assistance from the ACVIM/ACVS diplomate as appropriate for each case depending on the experience of the resident.

R. Timothy Bentley received his training in neurosurgery at Tufts University through the neurology service with Dominik Faissler, DVM, DECVN, which had a high surgical caseload.

Stephanie Thomovsky completed her training in neurosurgery here at Purdue University, and has spent 4 years performing routine and advanced neurosurgeries at WSU.

Melissa Lewis completed her training in neurosurgery at NCSU, which had a high surgical caseload.

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:

Residents are responsible for performing electrodiagnostic evaluations on their cases throughout their residency program, under the supervision of board-certified neurologists as deemed appropriate for each case based on resident experience. Residents are encouraged to observe and/or participate in any electrodiagnostic evaluation that is conducted, even if the patient is not directly their case. Routine electrodiagnostic evaluation will include complete EMG, MNCV, Rep Stim, and F waves (approximately 10-20 cases per year). In some rare cases, sensory studies may be performed, although this is not typical and involved 0-1 case per year. BAER testing appointments are available for scheduling each week; however we typically evaluate 20-30 cases a year perhaps. EEG is performed in some seizure cases for teaching purposes, or for clinical differentiation of seizure vs. dysphoria, or for evaluation of obtunded/coma cases. Approximately 15 EEGs are performed each year (this metric has not yet been collected in our case data; however this is a reasonable estimate).

Printouts of electrodiagnostic results are copied for each resident to review and analyze according to the principles presented in Dr. Cuddon's electrodiagnostic manual.

Weekly resident rounds rotate through topics, including periodic discussions at the board-preparation level of electrodiagnostic evaluation, wave form derivations, and electrophysiology. This can be supplemented by courses sponsored at ACVIM Resident reviews, as well as the Neuroscience course.

We conduct a 2-day lecture/laboratory workshop here at Purdue on electrophysiology hosted by Colette Williams,

most recently May 2015. This includes lectures and laboratories. We plan to continue this workshop for each set of residents (i.e., conduct the workshop every 3 years, funding permitting). Critical review of scientific literature is done weekly during Neurology Journal club. Grades are assigned for performance of journal club presentations each semester as part of the graduate school (non-thesis Masters degree) program

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:

Critical review of scientific literature is done weekly during Neurology Journal club. Grades are assigned for performance of journal club presentations each semester as part of the graduate school (non-thesis Masters degree) program.
Note that, except University Holidays (e.g. Christmas), journal club is held once a week, accumulating roughly 150 hours journal club during a 3 year residency.

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:

Reviews are conducted with each resident individually every 6 months. Case logs are required internally here at Purdue, and case logs are analyzed at each review to ensure a broad exposure to a variety of cases, as well as ensure adequate numbers of cases. Additionally, feedback is given as well as received as to the performance of the resident, and an assessment of the program features.

The residency program requirements locally at Purdue University also require reviews to be conducted every 6 months and specific departmental paperwork is required to document such reviews.

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.

Each resident is expected to choose a research project in the first year of their program. Initially, discussions are held to determine the resident's area of interest within neurology; however, at times their interest cannot be perfectly accommodated and a project within the field of interest of mentors or other faculty are selected. Once a topic is selected, the resident is expected to write a formal summary of the research question, literature search, and methodology/project design, and budget. This is reviewed with the project advisor and mentor. Once the project design is finalized, the resident must develop a written timeline for performing the various stages of the project, including the timeline for anticipated manuscript preparation and submission. This timeline is based on their off clinics/research time as scheduled throughout the program. Residents who fail to complete their research project will not receive their residency certificate until such time as the project (or equivalent research experience) is completed and documented. Publication of the project itself is not required, as some projects may not result in publishable data, but a written manuscript is required internally, with the hope/intent of submission and publication. If the research project is not publishable, then some other publication must be performed (e.g., case report, etc) in place of this.

Timeline: 1) establish research topic in first semester of program, 2) submit necessary IACUC or university paperwork and begin data collection by second semester of program, 3) finish data collection and begin data analysis in second year of program, 4) begin writing up research project report and manuscript, present abstract at Phi Zeta Research Day (or ACVIM) in third year of residency.

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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"/>	Various on-site
b) Ultrasonographic equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Various 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"/>	Various on-site
d) Electrocardiography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Various on-site
e) Blood Pressure Measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Various on-site
f) Radiation Therapy Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Linear Accelerator capable of SRS, on-site
g) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
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"/>	On-site
j) Electromyography and nerve conduction velocity testing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cadwell Sierra Wave 4 channel system. On-site
k) Evoked Response Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cadwell Sierra Wave 4 channel system. On-site
l) Electroencephalography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cadwell Sierra Wave 4 channel system. On-site
m) Computed Tomography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	64-slice. On-site.
n) Magnetic Resonance Imaging (include field strength)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GE 1.5T Signa LX 9.1 (on site)

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*:

For Kelly Cummings while at the ANC – a 1.5 Telsa MRI, CT and digital radiography are all on-site.

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:

<p>Neurology Journal Club – Held weekly. Focus is on those journal articles relevant to clinical neurology and board preparation. Discussion will include content/theory presented in the paper, as well as methods of critically reviewing scientific articles. The first journal club meeting of each year will be a tutorial on critical review of articles and the various types of study design.</p> <p>*Neurology Resident Rounds – Held weekly. Focus is on case based or topic based review in preparation for board</p>

exams, including Neuroanatomy, Neuroradiology, Neuropathology, Neurophysiology, Clinical Neurology/Case management, and Theory.

*Neuropathology Rounds – Held once monthly as a joint effort between the Neurology service, the Clinical pathology service, and the Anatomic pathology service. Includes evaluation/review of cytology and histopathology slides from neurological hospital cases, and topic discussion of those cases.

VTH Histopathology Rounds – Held 3 times per semester. Review of histopathology results from selected hospital cases. All house officers, students, and faculty attend.

*House Officer Grand Rounds/Seminar – Held weekly. All house officers are required to present one hour-long seminar each year of their program. All house officers and faculty attend weekly.

*(Indicates mandatory attendance)

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.

Each resident is required to give a formal seminar each year, in the seminar series for the Department of Veterinary Clinical Sciences. This is attended by students, graduate students and/or house officers, and faculty. Presentation of scientific abstracts at ACVIM or other national meetings is encouraged. All residents are required to present at least one poster or oral abstract at the Purdue University Phi Zeta Research Day during their program. All residents are required to assist with DVM and/or Vet Technician laboratories, pertaining to surgery and neurology.

All neurology residents are now required to give one or more lectures to the veterinary students at Purdue.

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
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

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

Yes	No	Number
<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Comments:

Residents are required to submit a manuscript in order to receive their certificate of completion of the residency program. (Submission is required, rather than publication.)

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

NA

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.