

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.

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="(614) 292-2597"/>
E-mail:	<input type="text" value="moore.2204@osu.edu"/>
Mailing Address:	<input type="text" value="601 Vernon L Tharp St. Columbus, OH 43210"/>

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

Primary Site Location:	<input type="text" value="The Ohio State University"/>	Length of Training Program:	<input type="text" value="3 year"/>
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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.**

Ronaldo da Costa - Neurology
Sarah Moore - 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
Karsten Schober - Cardiology Jaylyn Rhinehart - Cardiology Catherine Langston - SAIM Megan Brown - Oncology William Kisseberth - Oncology Joelle Fenger - Oncology Julie Byron - SAIM Catherine Langston - SAIM Valerie Parker - SAIM Jessica Quimby - SAIM Adam Rudinsky - SAIM	

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*
Ashley Hechler	7/15/16	7/14/19	Sarah Moore
Daniella Vansteenkiste	7/15/16	7/14/19	Ronaldo da Costa
Carolyn Nye	9/21/17	9/20/20	Ronaldo da Costa
Rebecca McBride	7/15/18	7/14/21	Sarah Moore
Lauren McAllister	7/15/19	7/14/22	



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 checked="" type="checkbox"/>
Other -provide details	<input type="text"/>

2. Advanced Degree:

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

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

The Residency program here at Ohio State University is combined with a Masters program. Masters degree candidates must complete 30 hours of didactic course work. These classes are mostly given at the College of Veterinary Medicine 3-5 mornings per week between 7 AM and 9 AM in the fall, winter and spring quarters. Residents actively work on their research projects while they are on clinical duty. In addition, each resident is allocated 2-4 weeks off clinical duties on several occasions through the 3 year program (total of 24 weeks off) and may petition for an additional 2-4 weeks off clinics if necessary. Candidates may elect to pursue a combined PhD program, which is then a 5 year program which follows the traditional 3 year program with an additional 2 years devoted entirely to PhD research and graduate studies.

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
NA		

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 Diplomate(s)	Specialty Certifying Body (ACVP or ECVP)	Clinical or Gross	Comments
Dr. Michael Oglesbee, DVM, PhD Dr. Mary Jo Burkhard, DVM, PhD Dr. Judy Radin, DVM, PhD Dr. Paul Stromberg, DVM, PhD Dr. Steven Weisbrode, VMD, PhD Dr. Maxey Wellman, DVM, MS, PhD Dr. Ryan Jennings, DVM, MS	ACVP ACVP ACVP ACVP ACVP ACVP ACVP	Gross Clinical Clinical Gross Gross Clinical Gross	All supervising diplomates listed are on-site

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 Diplomate(s)	Specialty Certifying Body (ACVR or ECVDI)	Comments
Dr. Wm. Tod Drost, DVM (DACVR) Dr. Eric Green, DVM (DACVR) Dr. Eric Hostnik (DACVR) Dr. Amy Habing (DACVR)	ACVR	All supervising diplomates listed are on-site

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 Diplomate(s)	Specialty Certifying Body	Comments
Dr. Lynette Cole, DVM, MS Dr. Wendy Lorch, DVM, PhD Dr. Sandra Diaz, DVM Dr. Richard Bednarski, DVM, MS Dr. Phillip Lerche, DVM, PhD Dr. Turi Aarnes, DVM, MS Dr. Anne Gemensky Metzler, DVM Dr. Eric Miller, DVM, MS Dr. Jonathan Dyce, MA, VetMB Dr. Mary McLoughlin, DVM, MS Dr. Kathleen Hamm, DVM, MS Dr. Stephen Jones	Dermatology Dermatology Dermatology Anesthesia Anesthesia Anesthesia Ophthalmology Ophthalmology Surgery Surgery Surgery Surgery	All supervising diplomates listed are on-site

Dr. Nina Kieves Dr. Ed Cooper, DVM Dr. Julien Guillaumin, DVM Dr. Page Yaxely Dr. Valerie Parke	Surgery and sports med ECC ECC ECC Nutrition (and SAIM)	
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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 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. 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.

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 *	42	40	39
Neurosurgery			
Neurology/Neurosurgery - Direct Supervision	42	36	38
Neurology/Neurosurgery - Indirect Supervision	1	1	1
Internal Medicine	4	2	0
Clinical Pathology	0	2	0
Radiology	0	0	2
Neuropathology	0	0	2
Other Rotation (please list the name of each rotation):			
Other: Boards preparation	0	4	4
Other: Electrodiagnostics	0	2	0
Research	3	2	2
Independent Study	0	1	1
Vacation	2	2	2
Total **	52	52	52

* 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:

Rounds will be conducted on a daily basis. A brief morning round will be conducted to update the group on the condition of each patient and plans for in-house patients. A second, more comprehensive, late afternoon round will

be conducted to discuss the cases seen during the day and plan the procedures for the next day. Residents will also routinely consult with their faculty individually after examining a case to discuss their findings, differential diagnoses, and diagnostic plan for that particular case

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

The Neurology Resident will have the opportunity to interact on a daily basis with 3 board certified Radiologists to discuss radiographic procedures. Additionally, each resident spends 2 weeks (80 hours) on the radiology clinical rotation during their residency.

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

Residents will spend a 2-week rotation on the clinical pathology service during their residency (80 hours). They will also be encouraged to discuss and review slides of cerebrospinal fluid cytology and biopsy results with the Clinical Pathologists and Residents on-clinics on a routine basis related to clinical cases.

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.

The College of Veterinary Medicine of the Ohio State University is fortunate to have a Neuropathologist on staff. Dr. Michael Oglesbee, Pathology Professor, coordinates monthly Neuropathology rounds (total of 36 hours over the course of a three-year residency) in which all members of the Neurology and Pathology section attend. In addition, the Resident will also attend the Neuropathology lectures (13 hours) in a Graduate Pathology course for Pathology Residents here at OSU, and can complement his/her training with review sessions such as those held at the ACVIM Forum or at the Neuroscience course. Lastly, residents will spend two weeks (80 hours) on the pathology clinical rotation during their residency.

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 will have hands on electrodiagnostics experience related to clinical cases. They will also attend lectures in electrodiagnostics as part of their graduate training and during Brain Camp. Lastly, they will spend two weeks shadowing an electrodiagnostics clinician at the local human hospital to gain additional exposure.

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.

The resident will actively participate in neurosurgical procedures throughout the course of their residency. This participation will consist of observation, assistance and performance commensurate with the resident's progress during the residency program. Neurosurgical training will be provided mainly by the neurologists. Dr. Moore holds an ACVIM neurosurgery certificate, and Drs. da Costa and Cook have received extensive neurosurgical training as part of their residency training. At OSU, neurosurgical responsibilities are divided equally between orthopedics and neurology. Neurology residents receive neurosurgical emergencies on week days and are on-call for out of hours surgery (nights and weekend) one week out of the month, providing ample opportunity for 50 hours of neurosurgical experience.

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 residents will serve as the neurology on call clinician to manage emergent medical and surgical neurology cases on a rotating basis throughout their residency. Our service always has one resident on call as the primary contact for neurologic

emergencies, as well as one faculty back up on call to assist when the resident needs help with their cases.

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:

Journal club is conducted once weekly providing a total of approximately 150 hours during a three-year residency.

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:

A formal resident evaluation form is completed every 6 months by the Advisor with additional input from other clinicians in the Service and in other specialties with whom the resident has interacted. This review is presented to the resident for discussion. Once finalized the evaluation is distributed to the resident, Department Chair, Service Head and the Chair of the Post-Professional Education Committee as a matter of record

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.

Completion of at least one research project is a requirement for the Masters degree which all residents must complete prior to receiving their residency certificate. There are a number of facilities both at the Veterinary College and at the College of Medicine that the Residents can use to conduct their Research. Bi-annual performance reviews and an advising committee are in place to ensure successful completion of the Master's project. Generally, by the end of the first year the resident is expected to have written a successful research proposal (generally funded by intramural grants), by the second year the resident has completed the project, and the third year is spent analysing data and writing and defending the thesis. Thesis defense generally occurs in early spring of the last year of the residency.

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; Digital radiographs; GE DRS 3.2
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b) Ultrasonographic equipment

<input checked="" type="checkbox"/>	<input type="checkbox"/>	on site; Acuson Sequoia 512
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c) Clinical Pathology capabilities:

<input checked="" type="checkbox"/>	<input type="checkbox"/>	on site; Various; managed by our hospital clinical pathology laboratory which is a commercial lab. CBC, chemisrty analyzer, blood gas analyzer, cytology, parasitology, microbiology and endocrinology are all available on site
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(includes CBC, serum chemistries, blood gases,

urinalysis, cytology, parasitology, microbiology, and endocrinology)			
d) Electrocardiography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Data scope Passport
e) Blood Pressure Measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Cardell 9402 and Ultrasonic Doppler 811-AL
f) Radiation Therapy Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Linear Accelerator; Seimans Mevatron MXE
g) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; OSU college of Vet med library with online search capabilities.
h) Computerized Medical Records w/Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; VetStar 7.0 and Filemaker Pro for computerized discharge summaries
i) Medical Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; OSU college of Vet med library with online search capabilities.
j) Electromyography and nerve conduction study testing	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Cadwell Sierra Wave
k) Evoked Response Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Cadwell Sierra Wave
l) Electroencephalography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; Cadwell Sierra Wave
m) Computed Tomography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site; GE LightSpeed Ultra 128 slice/sec
n) Magnetic Resonance Imaging (include field strength)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On site Acheiva, Phillips 3.0T

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*:

NA

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.

Clinicopathologic Conference (CPC) - case presentation/discussion by residents and faculty held on a weekly basis (1 hour per week).
 Journal/Book Club - discussion of articles/book chapters by residents and faculty (1 hour per week).
 Organ/disease oriented courses - didactic lectures presented by faculty for residents aimed at ACVIM examination prep (1-3 hours per week).
 Neuropathology rounds- held for one hour once monthly

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.

Residents are required to present a formal "grand rounds" style seminar twice yearly during CPC. They are also

required to present their thesis work to the college in a formal seminar during the spring of their third year. Residents also assist in neurologic examination labs that are held each year for the first and third year vet students (8 hours total per year).

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.

As part of the graduate curriculum, OSU residents take multiple didactic medical systems courses per year geared to general and specialty boards preparation (example respiratory, cardiology, clinical neurology). Each individual course provides 14-28 contact hours per semester of teaching time and residents are typically enrolled in 3 course per semester. Additionally, residents participate in 1 hour per month of neuropathology training, attend brain camp once during their residency, and attend the ACVIM forum during their second and third years of residency.

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

Comments: ACVIM during their second and third years, with additional meetings allowed if the resident is selected to present an abstract. Residents are also encourage but not required to attend brain camp

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

Yes	No	Number
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2-3

Comments: Results of research projects are expected to be published in the veterinary peer-reviewed literature. Additionally, the Residents will be encouraged to publish clinical reports during the course of their residency.

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

Please note that the detailed schedule provided is an example of a typical schedule. Each resident's schedule may differ slightly based on training needs and time commitments required for individual graduate research projects

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.