



RESIDENCY TRAINING PROGRAM REGISTRATION
2018-2019
CARDIOLOGY

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 Cardiology 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 Cardiology 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 which include multiple sites must provide detailed information as to which Diplomates in the specialty of Cardiology, as well as other Specialties, will be supervising the resident(s) at each site. In this program registration form, the Program Director must provide specific, detailed information regarding supervision and facilities available at each specific site(s).

The following forms must be completed and submitted annually: **Part One** is an online form and addresses general features of the program. **Part Two** addresses aspects of training that apply to all current residents. **Part Three** addresses aspects of training that may differ amongst residents enrolled in a single program. Part Three must be completed and submitted for EACH resident enrolled in the program.

Program Director Name:

(Must be a Diplomate of ACVIM in the Specialty of Cardiology or an approved ECVIM Diplomate in Cardiology)

Program Director's Contact Information:

Work Phone:	<input type="text" value="(607) 253-3081"/>
E-mail:	<input type="text" value="nsm2@cornell.edu"/>
Mailing Address:	<input type="text" value="College of Veterinary Medicine"/>
	<input type="text" value="930 Campus Road"/>
	<input type="text" value="Ithaca, NY 14850"/>

1. Location of Sponsoring Institution (Residency Training Program):

Primary Site:

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

2. Resident Advisor(s): Must be a Diplomate of ACVIM in the Specialty of Cardiology or an approved ECVIM Diplomate in Cardiology. There is no restriction on the number of Resident Advisors; however, **each Resident Advisor can supervise only two residents concurrently.**

[Nancy Moise](#)

3. Supervising Diplomate(s) on-site: (Must be a Diplomate of ACVIM in the Specialty of Cardiology or an approved ECVIM Diplomate in Cardiology).

[Bruce Kornreich - Cardiology](#)
[Nancy Moise - Cardiology](#)
[Romain Pariaut - Cardiology](#)
[Roberto Santilli - ECVIM-Cardiology](#)

4. Please list all **Diplomates** of ACVIM responsible for supervision of clinical training who are specialists in areas other than Cardiology. If off-site, please explain the situation, and the method of providing direct contact with the resident.

Name and Specialty

[Dorothy Ainsworth - LAIM](#)
[Sharon Center - SAIM](#)
[Curtis Dewey - Neurology](#)
[Thomas Divers - LAIM](#)
[Margaret McEntee - Oncology](#)
[John Randolph - SAIM](#)
[Kenneth Simpson - SAIM](#)
[Gillian Perkins - LAIM](#)
[Cheryl Balkman - Oncology](#)
[Kelly Hume - Oncology](#)
[Angela McCleary-Wheeler - Oncology](#)
[Meredith Miller - SAIM](#)

5. 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. All current residents and incoming residents (if known) should be listed here. Unless specifically approved, in advance, by the CRTCC, the ratio of cardiology residents to on-site Cardiology Diplomates who are actively involved in resident training cannot exceed 2 to 1.

Resident Name, Dates of Program, (Resident Advisor) *

[Shana Mintz 7.17.17 - 7.24.20 \(N. Sydney Moise\)](#)
[\(C. Bourguignon is in 4 year program\)](#)

* **There is no restriction on the number of Resident Advisors; however, each Resident Advisor can supervise only two residents concurrently.**

Please note, any 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



American College of **Veterinary** Internal Medicine

**RESIDENCY TRAINING PROGRAM REGISTRATION
2018-2019
CARDIOLOGY**

Part Two

Part Two of the Cardiology Residency Training Program addresses general features that apply to all current residents. (Part Three must be completed and submitted for each resident.)

Current Date:

Program Director Name:

(Must be a Diplomate of ACVIM in the Specialty of Cardiology or an approved ECVIM Diplomate in Cardiology)

Name of Sponsoring Institution (Residency Training Program):

1. Please list all **Diplomates** of the American College of Veterinary Pathology 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)	Clinical or Gross	Comments
Sean McDonough Kathleen Kelly Brennan	Gross/histopath Gross/histopath	None

2. Please list all **Diplomates** of the American College of Veterinary Radiology 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
Margret Thompson Peter Scrivani Amy Yeager	None

3. Please list the **Diplomates** available for consultation in the areas of dermatology, surgery, ophthalmology, anesthesiology, emergency/critical care, clinical nutrition, clinical pharmacology, 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
Daniel Fletcher Gretchen Schoeffler Robert Goggs Julie Menard William Miller, Jr. Rory Todhunter James Flanders Julia Sumner Kei Hayashi Ursula Krotscheck Galina Hayes Nita Irby Thomas Kern Eric Ledbetter Filipe Espinheira Robin Gleed	Emergency & Critical Care Emergency & Critical Care Emergency & Critical Care Emergency & Critical Care Dermatology Small Animal Surgery Small Animal Surgery Small Animal Surgery Small Animal Surgery Small Animal Surgery Small Animal Surgery Small Animal Surgery Ophthalmology Ophthalmology Ophthalmology Ophthalmology Anesthesiology	We also have numerous faculty members in large animal internal medicine and surgery. We have a 4-5% large animal case-load and the direct interaction on clinical cardiology cases with these faculty members is limited.

Manuel Martin Flores	Anesthesiology	
Luis Campoy	Anesthesiology	
Jordyn Boesch	Anesthesiology	
Soon Hon Cheong	Theriogenology	
Mariana Diel de Amorim	Theriogenology	
Joseph Wakshlag	Nutrition	
Curtis Dewey	Neurology	
Emma Davies	Neurology	

4. Didactic Learning Opportunities and Research Requirements: In recognition of the importance of scientific discovery as a critical mission of the ACVIM, all Residency Training Programs shall include an assessment period or instruction and/or participation in creative scholarship which will foster an appreciation of, competency in, and contribution to the knowledge base of their respective specialty and which will support their development as clinician scientists. This requirement is fulfilled through satisfactory completion of A and one of B [See CM 5.E and 5.F]:

- A. Journal Club: Routine and regular participation in a critical review of the literature, a minimum of eighty (80) hours during the program. Describe how this requirement is met or exceeded.

Book/journal/topic Club – Friday 1:00 PM – Cardiology faculty and residents review papers, chapters, and specific topics with the residents. We anticipate this will occur 45 out of 52 weeks/year. Therefore, over 3 years that will be 135 hours.

- B. Cardiology-focused Educational Experiences: Please provide a description of how the required one hundred fifty (150) hours will be met or exceeded. [See CM 5.E.2]

International ECG/EP Rounds- Friday 10:00 AM – 12:00 PM – We have a 2 hour session 3 of 4 Fridays/month with our Cornell Team and Dr. Roberto Santilli (we have these rounds when Dr. Santilli is here at Cornell as well as when he is in Italy). During this time we have in-depth discussions concerning electrocardiography, cardiac electrophysiology, Holter analysis, and basic mechanisms of arrhythmias. Residents and faculty present data for discussion.

Graphics/board review– Dr. Moise reviews with residents, electrocardiograms, pressure tracings, angiocardiograms, and other material in preparation for boards. These sessions occur throughout the residency program with increased intensity during the 3rd year. A total of approximately 30 to 50 sessions occur during the residency program.

Team Cardio and Team Anesthesia Rounds – In April 2014 we introduced this new learning venture to discuss cases from procedures, ECGs, pressure tracings, physiology and other topics relevant to both cardiology and anesthesia. These rounds occur sporadically but there are approximately 10 to 20 per year.

Cardiology Case Rounds - 7:30 AM - weekly case rounds with discussions whereby a single case is studied in detail. Dr. Kornreich presents all of these. These discussions are in addition to regular case rounds which will occur during the training of clinical medicine.

Weekly Resident Teaching sessions are provided for all residents on statistics, grant writing, abstract writing, manuscript preparation and teaching. These sessions are provided for all residents to Cornell University.

Resident Internal Medicine Club -Weekly review sessions are held with the internal medicine residents and the cardiology resident.

Bimonthly Specific Electrophysiology Topic presentations prepared by resident and faculty. A list of topics to be addressed will be prepared.

We also have ad hoc training sessions to cover special topics. These are documented as well.

The 80 hour requirement will be exceeded.

- C. Successful completion of any one of the options listed below. Describe how this will be fulfilled or exceeded in the individual trainee's specific application.
1. Successful completion of at least two (2) of the following three (3) short courses/workshops offered by ACVIM either on-line or at the Forum:
 - A. Critical evaluation of veterinary medical/biomedical literature
 - B. Grant Writing
 - C. Study, design and participation in clinical trials
 2. Documented submission of a grant proposal (by advisor letter)
 3. Acceptance and presentation at a scientific meeting of an abstract (oral or poster) of original work
 4. Documented completion (by advisor letter) of a prospective or retrospective research program pertinent to the candidate's specialty
 5. Documented completion (by advisor letter) of graduate course work in biostatistics, research methods, and/or research ethics.

GRANT WRITING AND SUBMISSION: The resident is expected to participate in the writing of a grant for ACVIM resident projects and for our internal grants program as a minimum. Our research office has a yearly 3 hour session on the writing of abstracts and grants.

ABSTRACT PRESENTATION: The resident will be expected to present an abstract at the ACVIM or ECVIM meeting during the 3rd year concerning their research. In addition, the resident will present at the Upstate New York Cardiac Electrophysiology meeting that is held each year if the research project is applicable to this meeting. If deemed probable based on the outcome of the research other presentations may occur.

RESEARCH PROJECT: The research project must be prospective and hypothesis driven. For this particular program the research project will be revolving around electrophysiology. Our program highly values the research interaction with the mentor and the resident to ensure that the resident understands completely the research program and that the resident takes ownership of the project. Although the resident will have opportunities to work independently and demonstrate their ability for original thinking and investigation, the mentor will be sure that the learning is of quality as is the project to maximize the use of the experienced cardiologist. The research projects will be under the mentorship of Drs. Romain Pariaut and Sydney Moise.

SPECIALIZED PRESENTATIONS: We will also be having monthly to bimonthly presentations made to our group in arrhythmias and electrophysiology for this specialized training by experts in the human field. We will be having these presentations via WebEx or Skype. This will be made possible because of a grant given to our program by Dr. Joel Edwards.

Note: Letters of documentation by advisors will need to accompany the final submission of the Resident Logs to the Residency Training Committee in order to qualify for a resident certificate.

5. Please indicate the availability of the following facilities or equipment. Indicate if these are available on-site 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. See CM 5.D for details.

	Available?		Location of equipment? (On-site or list site name)
	Yes	No	
a) Standard radiological equipment [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Ultrasonographic equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) Echocardiography equipment [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) Cardiac catheterization capability [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e) Endoscopy equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
GI equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Bronchoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cystoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Rhinoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Laparoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

f) Clinical Pathology capabilities: (includes CBC, serum chemistries, blood gases, urinalysis, cytology, parasitology, microbiology, endocrinology, anatomic and histopathology)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
g) Serum osmolality measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
h) Colloid oncotic pressure measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
i) Electrocardiography [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
j) Blood Pressure Measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
k) Electroencephalography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
l) Electromyography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
m) Brainstem Auditory Evoked Response Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
n) Nuclear Medicine [access is desirable]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
o) Computed Tomography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
p) Magnetic Resonance Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
q) Radiation Therapy Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
r) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
s) Computerized Medical Records w/Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
t) Medical Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
u) Intensive Care Facility – 24 hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
v) Urethral pressure profile & cystometry	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
w) Hemodialysis capability	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
x) Total parenteral nutrition capability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

If any of the above equipment or facilities are available off-site, please explain how the resident can access them for case management, research, or study.

We also have an on-site Holter analysis system with recorders, electrophysiology stimulation equipment, BioPac data acquisition systems for pressure and electrophysiology studies, Medtronic and St. Jude pacemaker programmers. We also have the St. Jude electrophysiology and mapping system with all necessary equipment for performing cardiac ablations.

6. Total Cardiology caseload per year:	800
Number of cardiac catheterizations per year:	25
Number of echocardiographic examinations per year:	700

7. Please list the residents who have completed the cardiology training programs at your site within the last five years, including the year that each individual's training program started and ended. If at all possible, please indicate whether the individual has completed the board certification process.

Name(s)	Program Start Date (mm/dd/yyyy)	Program End Date (mm/dd/yyyy)	Diplomate Status (Yes or No)
Fred Brewer	07/19/2010	07/21/2013	Yes
Eva Oxford	07/15/2013	07/24/2017	No
Flavia Busnello Giacomazzi	07/15/2014	07/24/2017	No

8. 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. All current residents and incoming residents (if known) should be listed here. Part Three of this form must be completed for each resident listed here. Unless specifically approved, in advance, by the CRTC, the ratio of cardiology residents to on-site Cardiology Diplomates who are actively involved in resident training cannot exceed 2 to 1.

Resident Name(s) (first/last)	Program Start Date (mm/dd/yyyy)	Program End Date (mm/dd/yyyy)	Resident Advisor Name(s) (first/last)
Shana Mintz	07/17/2017	~07/24/2020	N. Sydney Moise
Christophe Bourguignon	07/17/2017	~07/24/2021	N. Sydney Moise

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**

As Program Director, I verify that I have read the Certification Manual and that the above information is an accurate reflection of this Residency Training Program.



American College of **Veterinary** Internal Medicine

RESIDENCY TRAINING PROGRAM REGISTRATION
2018-2019
CARDIOLOGY

Part Three

Part Three of the Cardiology Residency Training Program addresses general features of the program that apply to each resident enrolled in the program. Please complete a separate Part Three for each resident enrolled in the program.

Current Date:

Program Director Name:

Name of Sponsoring Institution (Residency Training Program):

(Must be a Diplomate of ACVIM in the Specialty of Cardiology or an approved ECVIM Diplomate in Cardiology)

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.

- 1. Please provide the name of the cardiology resident for whom this application applies (leave blank at time of submission for program approval if name is not known). **Information contained in Part Three is applicable to one resident. If more than one resident is involved in the RTP, please complete one separate Part Three for each resident.**

Resident Name (first/last)	Program Start Date (mm/dd/yyyy)	Program End Date (mm/dd/yyyy)	ACVIM Cardiology Resident Advisor (first/last)
Shana Mintz	07/24/2017	~07/24/2020	N. Sydney Moise

- 2. Is the duration of your program thirty six (36) months?

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

If no, explain why the program is longer than thirty six (36) months:

- 3. Advanced Degree:

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

What is the approximate time (months) dedicated to graduate work?

Please provide a description of the graduate degree program if offered, including the didactic program (course work) and inter-relationship with the residency program. Be sure to make clear how the residency requirements will be met:

N/A

4. Will the resident fulfil the didactic learning opportunities and research requirements as stated in the Part 2 form, section 4?

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

If no, explain how the resident will fulfil the requirements:

5. Is training provided at a secondary site to fulfill a portion (not to exceed four (4) months) of the twenty four (24) months of required active (direct) supervision or to fulfill invasive procedural requirements? If Yes, please complete the remainder of this section. [See CM 5.G]

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

If yes, describe in detail:

Please list the Secondary Site and responsible Advisor at that site (list all, if more than one):

Required training provided by supervising Cardiology Diplomates at secondary sites must be documented by a letter of both commitment and completion sent by the supervisor at the secondary site. Appropriate procedure, echocardiography and structured educational experience logs must also be signed by the supervising Cardiology Diplomat when appropriate. [See CM 5.G]

6. Additional secondary site experiences that do not fulfill a portion of the required twenty four (24) months of active (direct) supervision or the required five hundred (500) echocardiograms, two hundred thirty (230) hours of structured educational experiences or fifteen (15) invasive procedures are supplemental (optional) experiences and do not require documentation from supervising Diplomates.

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

Briefly describe any secondary site supplemental outside experiences:

These experiences would include those at the medical school in New York City, the medical school in Syracuse New York, and perhaps the electrophysiology clinic of Dr. Roberto Santilli in Italy. Please note that Dr. Santilli during the 3 years of this training program will be coming to Cornell University for 15 weeks per year.

7. Please provide a description of how the required twenty four (24) months of active (direct) supervision will be met or exceeded as well as additional (indirect) supervision to complete the thirty six (36) month training period. [See CM 5.B and 5.C.1 for definitions related to training programs including active (direct) supervision.]

Definitions from 5.B:

Direct Supervision: The SD and resident are participating in a clinical practice in which both the Diplomat and the resident are on the clinic floor interactively, and concurrently managing cases. The Diplomat need not personally examine each patient seen by the resident, but must remain physically available on-site and review the case with the resident.

Indirect Supervision: The SD and resident although participating in a clinical practice together, are not on the clinic floor simultaneously and so are not concurrently managing cases. To qualify as indirect supervision, the SD is required to be on-site and have face to face contact with the resident at least one hour per day for the entire week that the resident is on duty.

Our training program is one in which the faculty are directly on the floor with the resident approximately 90% of the time. Faculty are either directly seeing and overseeing the diagnostics of each patient or they are in an adjoining room communicating about the patients seen or writing reports concerning these patients. Our clinical training program is one in which a great deal of interaction occurs between faculty and residents. This is true with regards to the structured teaching and research mentorship as well.

8. Please provide an outline of a typical weekly schedule

We receive appointments most commonly 4 days per week. If we have invasive procedures then one day per week will be dedicated to this activity. We typically have 4 appointments with 4 consults per day. Thursday is our procedure day. On Friday we see consults and in addition this is what we call our structured learning day. On this day we have board review sessions approximately half the year of 30 minutes until 9:45 AM which is then followed by our electrophysiology rounds at 10 AM for 2 hours. Then at 1 PM we have our Journal club. After our Journal club we have a 30 minute Holter review whereby the Holter analyses performed that week are reviewed. On Wednesday mornings at 8 AM approximately 20 times per year we have joined cardiology rounds with the anesthesia team. Some of our Journal clubs are replaced by presentations by faculty or residents on a specific topic.

Name of Residency Training Program:

Cornell University College of Veterinary Medicine

Note: Signatures are only required on the original application submitted at the time of program registration, not on the annual updates unless significant changes to the training program occur.

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

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