



**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:	(519) 830-5644
E-mail:	sfonfara@uoguelph.ca
Mailing Address:	50 Stone Rd Department of Clinical Studies, University of Guelph Guelph, ON N1G 2W1 Canada

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

Primary Site:

Multi-site programs, if any, are listed in Part Two.
[None Listed](#)

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.**

[Sonja Fonfara](#)

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

[Sonja Fonfara - 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

[Anthony Abrams-Ogg - SAIM](#)
[J. Paul Woods - SAIM & Oncology](#)
[Maureen Barry - SAIM](#)
[Alice Defarges - SAIM](#)
[Shauna Blois - SAIM](#)
[Fiona James - Neurology](#)
[Danielle Richardson - SAIM](#)
[Anthony Mutsaers - Oncology](#)

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 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, Dates of Program, (Resident Advisor) *

[Michelle Colpitts 9.25.17 - 9.24.20 \(Sonja Fonfara\)](#)

*** 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

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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: February 28, 2018

Program Director Name: Lynne O'Sullivan

(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): Ontario Veterinary College, University of Guelph (3-year)

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
Dr. Darren Wood	Clinical	
Dr. Dorothee Bienze	Clinical	
Dr. Janet Beeler-Marfisi	Clinical	
Dr. Jeff Caswell	Gross	
Dr. Rob Foster	Gross	
Dr. Brandon Lillie	Gross	
Dr. Brandon Plattner	Gross	
Dr. Geoffrey Wood	Gross	

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
Dr. Stephanie Nykamp	
Dr. Alex zur Linden	

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
Dr. Brigitte Brisson	Surgery	
Dr. Noel Moens	Surgery	
Dr. Tom Gibson	Surgery	
Dr. Ameet Singh	Surgery	
Dr. Michelle Oblak	Surgery	
Dr. Chantale Pinard	Ophthalmology	
Dr. Carolyn Kerr	Anesthesiology	
Dr. Melissa Sinclair	Anesthesiology	
Dr. Alexander Valverde	Anesthesiology	
Dr. Andrea Sanchez	Anesthesiology	
Dr. Alexa Bersenas	ECC	

Dr. Shane Bateman Dr. Ron Johnson Dr. Cathy Gartley Dr. Adronie Verbrugghe	ECC Clinical Pharmacology Theriogenology Clinical Nutrition	
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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.

Weekly cardiology journal club is held where 1-2 papers in the current veterinary or human cardiology literature are discussed : 1 hr/week for average of 44 weeks/year = 132 hours over 3-year program. Supplementing this is periodic participation in weekly Internal Medicine journal club, particularly in the time leading up to the General Exam.

- 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]

Cardiology-focused educational experiences will be met with weekly ECG rounds, weekly textbook chapter review sessions or topic-driven investigations (referred to as Readings in Cardiology), and formal graduate coursework in cardiology topics, statistics, or related physiology/pathophysiology such as renal and respiratory (minimum of 5 one-semester courses for DVSc degree).

A typical weekly schedule would include the following dedicated time to structured educational experiences:

Monday:	8:00 - 9:00	Readings in Cardiology or formal course
Tuesday:	8:00 – 9:00	ECG rounds
Wednesday:	8:00-9:00	Grand Rounds - College wide Resident and Intern presentations
Thursday:	8:00 – 9:00	Readings in Cardiology or formal course
Friday:	8:00 – 9:00	Journal Club

In the above, 3 hours/week could qualify as eligible experiences (over and above journal club since counted separately and excluding grand rounds). If this is maintained for an average of 44 weeks/year = 396 hours over 3-year program

- 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.

The University of Guelph residency program includes a graduate degree, the DVSc (Doctorate of Veterinary Science), with up to 12 months of the program devoted to research activities. Candidates are required to carry out a prospective research project, involving writing a proposal, carrying out the data collection and analysis, writing a thesis, and defending the thesis in a formal examination process with an external examiner. Presentation of research at the ACVIM forum and publication are

encouraged. The DVSc program also requires university graduate coursework (5 one-semester courses), of which at least one course must be a statistics course. Therefore items 4 and 5 will occur as a result of the DVSc program, and item 3 is encouraged.

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"/>	On-site
b) Ultrasonographic equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
c) Echocardiography equipment [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
d) Cardiac catheterization capability [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
e) Endoscopy equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
GI equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
Bronchoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
Cystoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
Rhinoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
Laparoscopy	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
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"/>	On-site
g) Serum osmolality measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
h) Colloid oncotic pressure measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
i) Electrocardiography [must be on-site]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
j) Blood Pressure Measurement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
k) Electroencephalography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
l) Electromyography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
m) Brainstem Auditory Evoked Response Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
n) Nuclear Medicine [access is desirable]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
o) Computed Tomography	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
p) Magnetic Resonance Imaging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
q) Radiation Therapy Facility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
r) Veterinary Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
s) Computerized Medical Records w/Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
t) Medical Library w/Literature Searching Capabilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	McMaster University - 45 min drive
u) Intensive Care Facility – 24 hours	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
v) Urethral pressure profile & cystometrography	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
w) Hemodialysis capability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site
x) Total parenteral nutrition capability	<input checked="" type="checkbox"/>	<input type="checkbox"/>	On-site

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.

The closest medical school with a medical library is McMaster University which is a 45 min drive from the U of Guelph. Note, however, that much can be accessed online or through our library's interlibrary loan service. The University of Guelph library has online access to an extensive list of journals,

including most medical journals.

6. Total Cardiology caseload per year:	1400-1500
Number of cardiac catheterizations per year:	20-30
Number of echocardiographic examinations per year:	750-850

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)

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 CRTTC, 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)
Michelle Colpitts (3-year RTP)	09/25/2017	09/24/2020	Lynne O'Sullivan

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.



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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)
Michelle Colpitts	09/25/2017	09/24/2020	Lynne O'Sullivan

- 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PhD:	<input type="checkbox"/>	<input 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:

The University of Guelph has combined the clinical training of a residency and the research component of a graduate degree together under one program: a Doctorate of Veterinary Science, DVSc, degree. The DVSc program dedicates up to 12 months to the research segment of the degree. In most respects this program is analogous to a clinical residency combined with a Masters of Science degree available at other universities. The candidate has dedicated clinic duty time and off-clinic research time, allowing fulfillment of the requirements for both portions of the program. A detailed breakdown of the distribution of time is provided below in section 8.

The graduate degree component consists of:

1. An independent research project with literature review, data collection and analysis, thesis writing (doctoral thesis format), and formal thesis defense including an external examiner. Dedicated off-clinic time is allocated for this component of the program (see section 8 below).
2. A Comprehensive examination with written and oral components at the end of the second year to ensure the candidate is making satisfactory progress in training. Dedicated study time is allocated for this examination (see section 8 below).
3. Coursework - minimum 5 courses are required. One course must be in statistics. The remaining courses may be in topics such as arrhythmogenesis, echocardiography, advanced cardiac physiology, cardiac pathology, invasive cardiac monitoring, equine cardiology, and internal medicine. Depending on the nature of the research project, some courses may be geared towards topics relevant to the research. Coursework is typically dispersed throughout the program during both on and off-clinic time.

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:

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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:

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

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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:

2. Attendance at Echocardiography rounds at a local human teaching hospital

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 Diplomate and the resident are on the clinic floor interactively, and concurrently managing cases. The Diplomate 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.

Cardiology clinic duty with direct supervision: 104 weeks (provided by 2 faculty members over 3 years)
External clinical experiences or internal rotations with other services such as Internal Medicine or Emergency and Critical Care: 6 weeks (average 2 weeks/year)
DVSc research time: 27 weeks
DVSc Comprehensive exam and ACVIM general exam study time: 4 weeks
ACVIM Cardiology specialty exam study time: 6 weeks
Conference attendance: 3 weeks (1 week/year)
Vacation time: 6 weeks (2 weeks/year)

Adds to total of 156 weeks (3 years or 36 months)

8. Please provide an outline of a typical weekly schedule

Typical week on clinical duty

Monday:

Prior to 8:00 am Inpatient assessments

8:00 – 9:00 am Cardiology seminar or course (textbook chapter review, topic-driven literature investigation, or formal course)

9:00 – 9:30 am Orientation of senior students to the cardiology rotation

9:30 – 4:30 pm Receive referral cases, internal consultations, and emergencies

4:30 - 5:30 pm Rounds and inpatient plans

Tuesday:

Prior to 8:00 am Inpatient assessments

8:00 – 9:00 am ECG rounds

9:00 – 4:30 pm Receive referral cases, internal consultations, and emergencies

4:30 - 5:30 pm Rounds and inpatient plans

Wednesday:

Prior to 8:00 am Inpatient assessments

8:00 – 9:00 am Grand rounds (college-wide intern and resident case/topic presentations)

9:00 – 4:30 pm Interventional procedures, internal consultations, and emergencies

4:30 – 5:30 pm Rounds and inpatient plans

Thursday:

Prior to 8:00 am Inpatient assessments

8:00 – 9:00 am Cardiology seminar or course (textbook chapter review, topic-driven literature investigation, or formal course)

9:00 – 4:30 pm Receive referral cases, internal consultations and emergencies

4:30 - 5:30 pm Rounds and inpatient plans

Friday:

Prior to 8:00 am Inpatient assessments

8:00 – 9:00 am Cardiology Journal Club

9:00 - 4:30 am Receive rechecks, internal consultations, and emergencies

4:30 - 5:30 pm Rounds and inpatient plans

Name of Residency Training Program:

Ontario Veterinary College, University of Guelph, 3-year

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.