



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:	44 1707 666366
E-mail:	vluisfuentes@rvc.ac.uk
Mailing Address:	Clinical Science and Services Hawkshead Lane, North Mymms Hatfield, HE AL9 7TA United Kingdom

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.**

Virginia Luis Fuentes
David Connolly

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

Tsumugi Kurosawa - Cardiology
Virginia Luis Fuentes - Cardiology
David Connolly - ECVIM-CA

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

Richard Piercy - LAIM
Harriet Syme - SAIM
Imogen Johns - LAIM
Bettina Dunkel - LAIM
Rosanne Jepson - SAIM
Barbara Glanemann - SAIM
Sarah Stewart - SAIM
Ruth Gostelow - SAIM
Angela Taylor - Oncology
Charlotte Johnson - 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 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) *

Ilaria Spalla 7.1.15 - 6.30.18 (David Connolly)
Julie Kavanagh 7.1.16 - 6.30.19 (Virginia Luis Fuentes)
Joonbum Seo 7.1.17 - 6.30.20 (Virginia Luis Fuentes)

* 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
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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: 27 Feb 2018

Program Director Name: Virginia Luis Fuentes

(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): The Royal Veterinary College, London

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
Prof Ken Smith	Gross	FRCPATH
Dr Simon Priestnall	Gross	FRCPATH, DipACVP
Norelene Harrington	Gross	DipACVP
Jonathan Williams	Gross	DipECVP
Balazs Szladovits	Clinical	DipACVP
Laureen Peters	Clinical	DipACVP
Emma Holmes	Clinical	DipACVP

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
Chris Lamb	DipACVR, DipECVDI
Randi Drees	DipACVR, DipECVDI
Mauro Pivetta	DipECVDI
Ella Fitzgerald	DipECVDI

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
Ross Bond	ECVD	Dermatology
Anke Hendricks	ECVD	
Anette Loeffler	ECVD	
Dan Brockman	ACVS	Surgery
Sue Gregory	RCVS SA surgery	
Vicky Lipscomb	ECVS	
Zoe Halfacree	ECVS	
Karla Lee	ECVS	

Pilar Lafuente Richard Meeson Elvin Kulendra Nicola Kulendra Ignacio Calvo David Sajik	ACVS ECVS ECVS ECVS ECVS ECVS	
Marian Matas Riera Charlotte Lawson	ECVO ECVO	Ophthalmology
Hatim Alibhai Ludovic Pelligand Kata O Veres-Nyeki Chiara Adami Carolina Jimenez	ECVAA ECVAA ECVAA ACVAA ECVAA	Anesthesia
Dan Chan Lindsay Kellett-Gregory Karen Humm Dominic Barfield Duana McBride Stefano Cortellini	ACVECC ACVECC ACVECC ACVECC ACVECC ACVECC	Emergency & Critical Care
Dan Chan	ACVN	Clinical Nutrition
Jonathan Elliott	ECVPT	Clinical Pharmacology

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.

A weekly journal club is held throughout the year, providing approximately 140 hours over the 3 year program. Residents also participate in a weekly internal medicine journal club

- 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]

We have a weekly one-hour book club throughout the year, a weekly 45 minute ECG/graphics session, and a weekly 90 minute clinical case review, all under faculty supervision.

- 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.

2. Some of our residents will submit a grant proposal as part of their program
3. All our residents are expected to present at least one research abstract of original work at a scientific meeting
4. All residents must complete a research project as part of their Masters degree course in Clinical Veterinary Medicine (MVetMed)
5. All residents must complete MVetMed core modules in 'Describing and interpreting Clinical Data', 'Applied Research Skills', 'Evidence-based Veterinary Medicine', 'Applied Statistics and SPSS' and 'Scientific Writing'

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 type="checkbox"/>	<input checked="" type="checkbox"/>	
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 type="checkbox"/>	<input checked="" type="checkbox"/>	Radioiodine only
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"/>	Online
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"/>	CRRT only
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.

Patients are referred to a nearby private practice for radiation therapy. Urethral pressure profile measurement is only available at one research facility in the UK.

6. Total Cardiology caseload per year:	1288
Number of cardiac catheterizations per year:	17 in 2017
Number of echocardiographic examinations per year:	1247

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)
Paul Motskula (ECVIM)	07/01/2010	06/30/2013	Yes
Kieran Borgeat	07/01/2011	06/30/2014	Yes
Julia Sargent	07/01/2012	06/30/2015	Yes
Jessie Rose Payne	07/01/2013	06/30/2016	Yes
Tsumugi Anne Kurosawa	07/01/2014	06/30/2017	Yes

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)
Ilaria Spalla	07/01/2015	06/30/2018	David Connolly
Julie Kavanagh	07/01/2016	06/30/2019	Virginia Luis Fuentes
Joonbum Seo	07/01/2017	06/30/2020	Virginia Luis Fuentes

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)
Julie Kavanagh	07/01/2016	06/30/2019	Virginia Luis Fuentes

- 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 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:

All residents at the RVC (including those that already have a PhD) are required to complete a clinical Masters program (the MVetMed).

The MVetMed is a clinical masters degree that overlaps with board certification training. For example, the MVetMed research project contributes to fulfilment of the requirements of the ACVIM training programme. The taught program consists of 11 modules: 1 compulsory, 5 core modules and 5 elective modules. Core modules generally occur on Wed mornings from 9-10am OR Mondays 5-6pm. The timing of the elective modules is more variable; some are day courses, some are held on a series of afternoon/evening sessions. The remainder of the work for the Masters (the research project and its write-up) is completed during the residents' off-clinics/research blocks. The research component consists of a write-up of the research project in the format of a manuscript ready for submission to a peer-reviewed journal relevant to the resident's speciality board. Where the manuscript has been accepted for publication during the residency, the original submitted manuscript is submitted for the MVetMed examination.

Core modules (a minimum of 5 must be completed):

- Applied research skills
- Practical veterinary education
- IT skills
- Describing and interpreting clinical data
- Evidence-based veterinary medicine
- Applied statistics and SPSS
- Scientific writing (compulsory)

Elective modules (the number offered is greater than that included here, only those likely to be of interest to a cardiology resident are listed):

- Problem solving in neurology
- Emergency & critical care 1 - cardiovascular
- Cardiac pathophysiology
- Nephrology
- Emergency & critical care 2 - respiratory
- Oncology
- Basic Echocardiography
- Respiratory pathophysiology
- Emergency & critical care 3 - hemostasis
- Endocrinology
- ECG interpretation rounds
- Cardiology Journal Club
- Cardiology Book Club

The taught modules account for 50% of the overall mark for the MVetMed. The MVetMed degree program includes a research project that contributes the other 50% of the marks. A case report/case series is not suitable unless there is a pre-defined, testable hypothesis. After their first year, residents are required to submit an abstract outlining their proposed research project for assessment at the time of the first annual appraisal. After the second year, residents are required to defend an abstract presented as a poster at an internal research day. In the third year, the completed paper, or the research project written up in a format suitable for publication must be submitted, with an oral defense

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:

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 type="checkbox"/>

Briefly describe any secondary site supplemental outside experiences:

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.

All supervision is direct, and all residents are on duty interactively and concurrently with an ACVIM or ECVIM diplomate in cardiology. The vast majority of cases are seen by residents, and each case is discussed with the supervising Diplomate on the clinic floor, and every report is checked and amended by the supervising Diplomate. Excluding other clinical rotations, vacation and study time, this leaves a minimum of 28 months of active cardiology supervision.

8. Please provide an outline of a typical weekly schedule

Usually one Diplomate and two cardiology residents are on clinics at any one time, with 5 appointments scheduled on 3 days a week. One resident is the principal clinician for appointments, and the other resident sees fewer appointments but is responsible for other service consults and veterinarian advice calls. In-patients and cases transferred from the emergency service are reviewed prior to 8am and discussed with the supervisor at the start of the day. On appointment days, case slots are scheduled at 90 minute intervals from 9.30 am onwards. Echo exams are conducted throughout the day, and cases are discharged either after their work-up or at the end of the afternoon. Each

case is reviewed directly and continuously with the supervising Diplomate. Student and resident rounds are held at the end of the day and conducted by the supervising Diplomate. Journal clubs are held at 8.45am on Tuesdays. On Wednesdays, there is an MVetMed session 9-10am, and cardiology book club at 2pm. ECG rounds are held at 8.45am on Thursdays. Friday mornings (after small animal intern and resident seminars) are reserved for catheter interventions, with resident clinical rounds at 2pm.

Name of Residency Training Program:

The Royal Veterinary College

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.

Signature of Resident

Printed Name of Resident

Date

Signature of Program Director

Printed Name of Program Director

Date

Signature of Resident Advisor

Printed Name of Resident Advisor

Date

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
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As Program Director, I verify 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.

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- 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)
Joonbum Seo	07/01/2017	06/30/2020	Virginia Luis Fuentes

- 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 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:

All residents at the RVC (including those that already have a PhD) are required to complete a clinical Masters program (the MVetMed).

The MVetMed is a clinical masters degree that overlaps with board certification training. For example, the MVetMed research project contributes to fulfilment of the requirements of the ACVIM training programme. The taught program consists of 11 modules: 1 compulsory, 5 core modules and 5 elective modules. Core modules generally occur on Wed mornings from 9-10am OR Mondays 5-6pm. The timing of the elective modules is more variable; some are day courses, some are held on a series of afternoon/evening sessions. The remainder of the work for the Masters (the research project and its write-up) is completed during the residents' off-clinics/research blocks. The research component consists of a write-up of the research project in the format of a manuscript ready for submission to a peer-reviewed journal relevant to the resident's speciality board. Where the manuscript has been accepted for publication during the residency, the original submitted manuscript is submitted for the MVetMed examination.

Core modules (a minimum of 5 must be completed):

- Applied research skills
- Practical veterinary education
- IT skills
- Describing and interpreting clinical data
- Evidence-based veterinary medicine
- Applied statistics and SPSS
- Scientific writing (compulsory)

Elective modules (the number offered is greater than that included here, only those likely to be of interest to a cardiology resident are listed):

- Problem solving in neurology
- Emergency & critical care 1 - cardiovascular
- Cardiac pathophysiology
- Nephrology
- Emergency & critical care 2 - respiratory
- Oncology
- Basic Echocardiography
- Respiratory pathophysiology
- Emergency & critical care 3 - hemostasis
- Endocrinology
- ECG interpretation rounds
- Cardiology Journal Club
- Cardiology Book Club

The taught modules account for 50% of the overall mark for the MVetMed. The MVetMed degree program includes a research project that contributes the other 50% of the marks. A case report/case series is not suitable unless there is a pre-defined, testable hypothesis. After their first year, residents are required to submit an abstract outlining their proposed research project for assessment at the time of the first annual appraisal. After the second year, residents are required to defend an abstract presented as a poster at an internal research day. In the third year, the completed paper, or the research project written up in a format suitable for publication must be submitted, with an oral defense

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 type="checkbox"/>

Briefly describe any secondary site supplemental outside experiences:

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.

All supervision is direct, and all residents are on duty interactively and concurrently with an ACVIM or ECVIM diplomate in cardiology. The vast majority of cases are seen by residents, and each case is discussed with the supervising Diplomat on the clinic floor, and every report is checked and amended by the supervising Diplomat. Excluding other clinical rotations, vacation and study time, this leaves a minimum of 28 months of active cardiology supervision.

8. Please provide an outline of a typical weekly schedule

Usually one Diplomat and two cardiology residents are on clinics at any one time, with 5 appointments scheduled on 3 days a week. One resident is the principal clinician for appointments, and the other resident sees fewer appointments but is responsible for other service consults and veterinarian advice calls. In-patients and cases transferred from the emergency service are reviewed prior to 8am and discussed with the supervisor at the start of the day. On appointment days, case slots are scheduled at 90 minute intervals from 9.30 am onwards. Echo exams are conducted throughout the day, and cases are discharged either after their work-up or at the end of the afternoon. Each

case is reviewed directly and continuously with the supervising Diplomate. Student and resident rounds are held at the end of the day and conducted by the supervising Diplomate. Journal clubs are held at 8.45am on Tuesdays. On Wednesdays, there is an MVetMed session 9-10am, and cardiology book club at 2pm. ECG rounds are held at 8.45am on Thursdays. Friday mornings (after small animal intern and resident seminars) are reserved for catheter interventions, with resident clinical rounds at 2pm.

Name of Residency Training Program:

The Royal Veterinary College

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.

Signature of Resident

Printed Name of Resident

Date

Signature of Program Director

Printed Name of Program Director

Date

Signature of Resident Advisor

Printed Name of Resident Advisor

Date

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.



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)
Ilaria Spalla	07/01/2015	06/30/2018	David Connolly

- 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 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:

All residents at the RVC (including those that already have a PhD) are required to complete a clinical Masters program (the MVetMed).

The MVetMed is a clinical masters degree that overlaps with board certification training. For example, the MVetMed research project contributes to fulfilment of the requirements of the ACVIM training programme. The taught program consists of 11 modules: 1 compulsory, 5 core modules and 5 elective modules. Core modules generally occur on Wed mornings from 9-10am OR Mondays 5-6pm. The timing of the elective modules is more variable; some are day courses, some are held on a series of afternoon/evening sessions. The remainder of the work for the Masters (the research project and its write-up) is completed during the residents' off-clinics/research blocks. The research component consists of a write-up of the research project in the format of a manuscript ready for submission to a peer-reviewed journal relevant to the resident's speciality board. Where the manuscript has been accepted for publication during the residency, the original submitted manuscript is submitted for the MVetMed examination.

Core modules (a minimum of 5 must be completed):

- Applied research skills
- Practical veterinary education
- IT skills
- Describing and interpreting clinical data
- Evidence-based veterinary medicine
- Applied statistics and SPSS
- Scientific writing (compulsory)

Elective modules (the number offered is greater than that included here, only those likely to be of interest to a cardiology resident are listed):

- Problem solving in neurology
- Emergency & critical care 1 - cardiovascular
- Cardiac pathophysiology
- Nephrology
- Emergency & critical care 2 - respiratory
- Oncology
- Basic Echocardiography
- Respiratory pathophysiology
- Emergency & critical care 3 - hemostasis
- Endocrinology
- ECG interpretation rounds
- Cardiology Journal Club
- Cardiology Book Club

The taught modules account for 50% of the overall mark for the MVetMed. The MVetMed degree program includes a research project that contributes the other 50% of the marks. A case report/case series is not suitable unless there is a pre-defined, testable hypothesis. After their first year, residents are required to submit an abstract outlining their proposed research project for assessment at the time of the first annual appraisal. After the second year, residents are required to defend an abstract presented as a poster at an internal research day. In the third year, the completed paper, or the research project written up in a format suitable for publication must be submitted, with an oral defense

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"/>

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Printed Name of Resident

Date

Signature of Program Director

Printed Name of Program Director

Date

Signature of Resident Advisor

Printed Name of Resident Advisor

Date

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