ACVR Residency Training Program Application

This document is to act as a guide for institutions desiring ACVR accreditation of their residency training program. It should be used in concert with the requirements set out in the ACVR Essentials of Residency Training document and it follows the headings of that document. It is intended to streamline the application process and help define what information the RSEC needs to evaluate the program. All terms used in this application have same definitions as defined in the Essentials.

Institution Name:
The Royal Veterinary College, University of London

Email
rdrees@rvc.ac.uk

Objectives:

Succinctly state the objectives of the training program.

To enable the trainee to
• gain clinical proficiency in veterinary diagnostic imaging
• gain a critical understanding of veterinary diagnostic imaging
• pass the professional Board examinations in Veterinary Diagnostic Imaging
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Training Period:

What is the total length of the training program?
36 months

If the resident is not eligible to take the exam during the beginning of the third year (September), please state the reason.
NA

What are the responsibilities of the resident in the remaining non-clinical portion of the program?
Complete a clinical research project on the subject of imaging and submit manuscript for publication in a peer-reviewed veterinary journal. Present at a national or international veterinary diagnostic imaging conference.

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Direction and Supervision:

Program Director:

Who is the Director of Residency training?
Randi Drees

What percentage of this individual's time is committed to clinical service and teaching of
residents?
55%

Faculty:

Please list the faculty member of the program accepting PRIMARY responsibility for training in each of the following core areas:

Roentgen diagnosis
Emma Mapletoft 70%

Diagnostic ultrasound
Francisco Llabres-Diaz 70%

Computed Tomography
Randi Drees 50%

Magnetic Resonance Imaging
Helen Dirrig 70%

Nuclear Medicine
Dagmar Berner 70%

List the names and percentage clinical commitment of additional imaging faculty in the program, and their area(s) of instructional responsibility.
NA

Using the button below, please provide a one page CV documenting their expertise in the area(s) of assigned responsibility for each imaging faculty in the program.

For each speciality colleges listed below pleas list at least two Diplomates of these colleges who can be expected to regularly interact with radiology residents:

ACVIM
Bettina Dunkel

ACVIM
Rosanne Jepson

ACVS
Richard Piercy

ACVS
David Boldt
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Affiliation Agreement:

Using the button below, provide a copy of the affiliation agreement(s) in place if all of the training will not be accomplished on-site. Include the scope of the training and amount of time the resident will be away from the home institution.

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Facilities:

Briefly describe how the program meets the facility requirements.

Small Animal hospital
Radiography
• Room 1: 50kW generator, Eklin DR system.
- Room 2: Siemens Iconos R200 R/F system, 65kW generator, tilting table with Bucky and phototimer, 40cm digital image intensifier
- Also in Room 2: Fuji Capsula computed radiography system
- Operating theatre: Mobile Siemens SireMobil digital C-arm

Ultrasonography
- Samsung RS80A system with four transducers, 1-16MHz
- GE Vivid 7 cardiac system with 3, 7 & 10MHz transducer and dedicated workstation running EchoPAC software
- Ausonics Impact portable unit with 2.5, 3.5, 6, 7.5MHz transducers

Computed tomography
- Canon Genesis ONE, 320 MDCT
- Philips Intera 1.5T magnetic resonance imaging system with access for small and large animals

Large Animal hospital
Radiography
- Siemens Polydoros ceiling mounted high-output generator with linked grid system
- Fuji direct radiography system
- 4 Eklin Sprint portable x-ray units: 1 for theatre, 3 for ambulatory use
- Mobile Philips BV21 C-arm for fluoroscopic studies in theatre

Ultrasonography
- GE Vivid E9
- Piemedical scanner for foal unit
- Micromax and Sonosite Titan for farm animal use
- 4 Honda HS 2100 scanners for ambulatory use
- 2 DP 6900 scanners for student learning and research

Computed tomography
- Equine referral hospital: GE UltraLight 16 slice for standing horses and horses under GA
- Nuclear medicine
- MIE gamma camera with in-built and separate workstation, also accessible for small animal patients

MRI equipment:
- Equine referral hospital: Hallmark standing equine 0.27T MRI System

PACS & viewing software:
- Hospital owned server hosted Mach7T VNA
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Clinical Resources:

**Indicate the approximate number of patients seen annually by the home institution?**

23,000

**What is the annual imaging caseload?**

8,500

Indicate in percentages the approximate breakdown of the patient population according to species.

**Type a question**

- Small Animals (canine, feline): 6,200
- Large Animals (equine and food animals): 2,200
- Exotic Animals: <30

What is the approximate annual imaging caseload of the program in:

**Type a question**
Please check which of the following types of imaging cases the residents will have exposure to during the residency:

- Small Animal Echocardiography
- Large Animal Ultrasound
- Nonabdominal Small Animal Ultrasound (i.e. cervical, musculoskeletal)
- Food Animal
- Exotics
- Teleradiology/Referral Imaging

If the residents do NOT have exposure to any of the above types of imaging cases at your institution, please explain if/how they get the experience during the residency.

NA

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Training Content:
What percentage of imaging reports are typically available within 48 hours after the examination is conducted in typewritten or electronic form?

>95%

If your answer is less than 75%, please explain how reports are generated and how long it takes for the report to be available for review in typewritten form.

NA

If your answer is less than 75%, please explain how reports are generated and how long it takes for the report to be available for review in typewritten form.

NA

Of the preliminary reports generated from the imaging caseload what percentage are initially produced by the resident?

70%

What percentage of the resident reports are reviewed by the imaging faculty prior to finalization of the report?

>95%

When preliminary resident reports are reviewed and edited by the imaging faculty responsible for training, what percentage of the time are two or more faculty present?

>70%

For each category below, approximate the number of cases a single resident will be involved in the interpretation of during the course of the entire program.

**Type a question**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Animal Radiology</td>
<td>1250</td>
</tr>
<tr>
<td>Large Animal Radiology</td>
<td>1000</td>
</tr>
<tr>
<td>Abdominal Ultrasound</td>
<td>1200</td>
</tr>
<tr>
<td>Computed Tomography</td>
<td>1000</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>100</td>
</tr>
<tr>
<td>Magnetic Resonance Imaging</td>
<td>550</td>
</tr>
<tr>
<td>Elective (any of above): NA</td>
<td>NA</td>
</tr>
<tr>
<td>Required elective (specify): NA</td>
<td>NA</td>
</tr>
<tr>
<td>Total:</td>
<td>5100</td>
</tr>
</tbody>
</table>

Please indicate the course number and unit assignment residents are required to take to meet the educational objectives for formal instruction as outlined in the Essentials in the following:
Radiobiology
Ionising Radiation Physics: Interactions and Dosimetry (MPHYGB30) 4

Nuclear Medicine
Ionising Radiation Physics: Interactions and Dosimetry (MPHYGB30); Medical Imaging (MPHYGB10 and MPHYGB11 6

Ultrasoundography
Ionising Radiation Physics: Interactions and Dosimetry (MPHYGB30); Medical Imaging (MPHYGB10 and MPHYGB11 4

CT
Ionising Radiation Physics: Interactions and Dosimetry (MPHYGB30); Medical Imaging (MPHYGB10 and MPHYGB11 3

MRI
Ionising Radiation Physics: Interactions and Dosimetry (MPHYGB30); Medical Imaging (MPHYGB10 and MPHYGB11 7

If your program does not offer formal courses in any or all of these topics please indicate how these educational objectives for each are met. Use the button below to upload additional information as necessary.

NA

Research Environment:

Over the last five years, what is the average number of peer reviewed publications, on which the IMAGING faculty listed under Direction and Supervision in IV, are included as authors?
6/y

What is the number of publications/submissions expected of a resident completing the program?
2 papers accepted by peer-reviewed veterinary journal

If this is an established program, what percentage of residents have made formal research presentations at the annual ACVR or equivalent national meeting?
100%
Is an advanced degree a requirement of the training program?
Yes - MVetMed

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Educational Environment:

How many lectures or scientific presentations are expected of each resident during the course of their training?
6 in-house; at least 1 to national or international imaging meeting

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Evaluation 'Evaluation of residents and protection mechanisms':

Did all of your current resident(s) adequately complete the last six months of training?
Yes
If no, please explain:
NA

List the current members of the residents' review committee.
Randi Drees, Francisco Llabres Diaz, Emma Mapletoft, Helen Dirrig

List the internal mechanisms in place to protect your resident if conflicts arise.
• Annual review of progress with participation of 2 faculty members not directly involved in radiology resident training
• Interim review may be called by supervisor or resident as required
• Scholars experiencing difficulties can discuss these with Masters course director, the Head of the Graduate School or Chairman of PG Academic Progress Committee
• Grievances may be considered through the College's Complaints procedures. Complaints specifically about bullying or harassment should follow the procedure outlined in the College's Dignity at Work policy.

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Teaching File:

What is the nature and scope of the teaching file available to residents?
Compilation of patient information, clinical history, imaging findings and notes available on shared database. Numbers of cases held currently are canine/feline cases 420; rabbits 80; large animals 1800.

How is it maintained/updated?
New cases are reviewed by faculty and teaching file updated weekly by residents.

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Conferences:

On average how many Known Case Conferences are conducted annually?

40

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Literature Resources:

What is the geographic relationship between the nearest medical library and the training program?

Multiple medical libraries and The British Library are in London, a 20min train journey from Hawkshead campus.
Provide the pass rate for first time, second time, etc for both the preliminary and certifying exams for your residents for the past 5 years. For example, for all residents finishing your program 5 years ago (Year 5): x number passed prelim 1st time, y number passed certifying exam 1st time, z number was unsuccessful.

<table>
<thead>
<tr>
<th>Year</th>
<th>Passed preliminary exam 1st time</th>
<th>Passed preliminary exam 2nd time</th>
<th>Passed preliminary exam after 2nd time</th>
<th>Passed certifying exam 1st time</th>
<th>Passed certifying exam 2nd time</th>
<th>Passed certifying exam after 2nd time</th>
<th>Unsuccessful in all attempts</th>
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<tr>
<td>Year 5</td>
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<td></td>
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<td>Year 1</td>
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</tbody>
</table>

Provide a clinical schedule for your resident(s). This schedule should provide a weekly or monthly outline of the resident's clinical responsibilities. This may be in the form of a master schedule or duty roster for your entire radiology section if desired. Use the button below.

[Master residency schedule 2019 UPDATE.xlsx]