ACVR | Diagnostic Imaging

ACVR Diagnostic Imaging Residency Training Program Application

This application is required for institutions desiring ACVR accreditation of a new residency training program and for institutions requesting re-accreditation of an existing program.

Before beginning the application process, all applicants should review the most recent version of the [ACVR Residency Program Essential Training Standards and Requirements](RPE) (RPE) document (accessed from the Essentials Homepage) in detail. Use the RPE as a reference when completing the application form, as the contents you provide herein will be evaluated by the Residency Standards and Evaluation Committee (RSEC) against the published RPE standards. This application form follows the headings of the RPE. All terms used in this application have same definitions as those in the RPE, and no information provided in the application form itself will supersede that published in the RPE.

During the application review process, the Chair or Assistant Chair of the RSEC may contact the applicant for additional information or clarification.

Note: If you wish to save your submission and complete it later, click the save button located at the bottom of the pages. You will be emailed a link to complete your form at a later date.

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Program Summary

The Residency Director of the program is expected to be the primary applicant and contact person for this application. The Residency Director must be located at the primary training institution.

Institution Name University College Dublin

Residency Program Director Name Seamus Hoey

Residency Program Director Email seamus.hoey@ucd.ie

Program Type

What type of residency program is being requested?

> Traditional Residency Program

If approved, what is the proposed start date of this residency program? Tuesday, January 31, 2023

Objectives

Succinctly state the objectives of the training program.

The residency training programme is designed to train veterinary radiology residents in veterinary radiology, including radiography, ultrasound, computed tomography and magnetic resonance imaging, and with exposure to nuclear medicine principles.

The programme includes didactic teaching and a comprehensive rounds schedule. The ultimate goal is to allow the resident to reach the level necessary to be successful in the ACVR certifying examination.

Training Period

What is the total length of the training program? 48

What is the anticipated length of supervised clinical training a resident will experience during this program?   36

Will the resident(s) in this program be eligible to take the ACVR Preliminary Exam in September of their third year?   Yes

What are the responsibilities of the resident(s) during non-clinical portions of the program?

The residency programme contains a professional doctorate, the Doctorate of Veterinary Medicine Specialisation. Research undertaken during residency will be submitted for publication and international presentation. As such the non-clinical portion will be occupied with thesis preparation before the conclusion of the Doctorate programme.

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Direction and Supervision

When calculating time commitment in this section, you may consider a 100% (full time) duty schedule to consist of 48 weeks per year with 8 hours per day or 40 hours per week.

Residency Director

Please review the Residency Director requirements and responsibilities in the [ACVR Residency Program Essential Training Standards and Requirements](#) (RPE) document. Note that the Residency Director will be required to provide at least 24 weeks of clinical duty per year in primary support of residents in this program and to meet all other qualifications of a Supervising Diplomate.

Is the applicant Residency Director for this program prepared to meet these requirements?   Yes

What percentage of the Residency Director's time is committed to clinical service at the primary training institution?   70

How many weeks per year will the Residency Director be on clinical service and teaching residents at the primary training institution?   35

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Additional Training Diplomates

Please review the definitions and responsibilities of [Supervising Diplomate and Supporting Diplomate](#) in the RPE document. Note that Supervising Diplomates will be required to provide at least 10 weeks of clinical duty in primary support of residents in this program, and are expected to participate in all facets of residency training. Supporting Diplomates aid in residency training, but provide support that is limited, as by modality (e.g. only works in ultrasound), time commitment (e.g. clinical duty < 10 weeks per year), or other constraints that prevent them from qualifying as a Supervising Diplomate.

Provide a copy of affiliation agreements with any diplomates that are located at an external institution (see Affiliation Agreement item at the end of this section).

Excluding the Residency Director, please list all training diplomates who will act as Supervising Diplomates of this residency program. Indicate the approximate number of hours per year each supervisor will be scheduled on clinical duty with primary support of residents and, if applicable, any specific areas of instructional responsibility (e.g. trains mostly in small animal, trains mostly in MRI, etc). If a 'Supervising Diplomate' position will be comprised of multiple radiologists, please list the cohort as a single entity or institution for this question (e.g. "teleradiologists" or private institution name)

Name: Cliona Skelly   Hours/Year: 1960

Specific Areas and/or Limitations of Instructional Responsibility: All modalities

Institution: University College Dublin

Name: Antonella Puggioni

Hours/Year: 1960

Specific Areas and/or Limitations of Instructional Responsibility: All modalities

Institution:

Name: Emma Tobin   Hours/Year: 360

Specific Areas and/or Limitations of Instructional Responsibility: Diagnostic Ultrasound and Radiography

Institution: University College Dublin

Name: Hester McAllister   Hours/Year: 360

Specific Areas and/or Limitations of Instructional Responsibility: Small and large animal Radiography

Institution:

In addition to ACVR/ECVDI Diplomates, the program must arrange for the resident(s) to have direct access to specialists in other areas. Please identify one member in each of the specialty colleges listed below that has agreed to support this program through clinical activity that allows regular interactions between the specialist and the diagnostic imaging residents (e.g. discussion of diagnostic work up, imaging findings, or patient outcomes, and/or participation in interdisciplinary rounds, etc). Indicate whether the specialist is located on-site at the primary institution at an external institution. Provide a copy of affiliation agreements with any non-ACVR/ECVDI diplomates that are

located at an external institution (see Affiliation Agreement section at the end of this application). Upon completion of this application, the below individuals will receive an email requesting acknowledgement of their support of your residency program.

ACVIM Member Name   Vivienne Duggan

ACVIM Member Institution   University College Dublin

ACVIM Member Email   vivienne.duggan@ucd.ie

ACVS Member Name   Ronan Mullins

ACVS Member Institution   University College Dublin

ACVS Member Email   ronan.mullins@ucd.ie

ACVP Member Name   Peter O'Brien

ACVP Member Institution   University College Dublin

ACVP Member Email   peter.james.obrien@ucd.ie

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Resident:Supervising Diplomate Ratio

The number of residents in the program cannot exceed twice the number of Supervising Diplomates **on-site**. Remote Supervising Diplomates will not count when calculating the maximum residents allowed in a given program.

What is the maximum number of imaging interns you will have enrolled in this training program at any given time?   2

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Facilities

Review the Facility Requirements listed in the RPE document. Note also that residents should have opportunities to be involved with image acquisition and protocol set-up.
Does this residency training program provide on-site access to modern equipment for the following modalities?

Digital or Computed Radiography   Yes

Fluoroscopy   Yes

Ultrasound with Doppler Capability   Yes

MRI   Yes

Fan-beam CT   Yes

Nuclear scintigraphy   No

Briefly describe how this program meets the facility requirements, including the specific type of CT and MRI units available. Explain how your program will train residents in modalities for which equipment is not located on site, providing affiliation agreements if applicable. (see Affiliation Agreement item at the end of this section)

CT: 16 slice Siemens Somaton Scope sliding gantry with small animal table and table and stocks for large animals
MRI: 1.5T GE Signa Artist

Please describe how residents will gain experience in image acquisition and protocol set-up for each of these modalities (excluding nuclear medicine).

Radiography, CT and MRI mages are routinely acquired by our radiographer team, however all residents will be involved in acquisition of all US images and intermittently will acquire radiography, and CT in small and large animal cases, and small animal MRI cases.

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Clinical Resources and Training Content

Review the clinical resource and training content requirements listed in the RPE document

What is the average annual caseload at the primary institution over the past 3 years? This number will include all patient visits whether or not they contribute to the annual imaging caseload.   9950

What is the average annual imaging caseload at the primary institution over the past 3 years? Each body region imaged for a given patient (e.g. thorax, abdomen, spine, etc) will count as a single study.   7103

What is the average annual imaging caseload at the primary institution over the past 3 years in the following categories?

Small animal radiology	4100
Large animal radiology	990
Abdominal ultrasound	1104
Non-abdominal ultrasound	499
Computed tomography	960
Magnetic Resonance Imaging	226
Nuclear scintigraphy	0

Indicate the approximate species breakdown of the imaging caseload at the primary institution in the following categories:

Small animals (canine, feline): 80%

Large animals (equine, bovine, porcine, etc.): 19%

Avian, Exotic, and Wildlife animals: 1%

Which of the following types of imaging cases will the resident(s) have direct, on-site exposure to at the primary institution during the residency program?

Echocardiography

Yes

Large animal ultrasound

Yes

Nonabdominal small animal ultrasound (i.e. cervical, musculoskeletal)

Yes

Food/fiber animal imaging

Yes

Exotics imaging

Yes

Teleradiology/Referral imaging

Yes

Explain how the resident(s) in this program will gain experience in any of the above types of imaging cases that are NOT available at the primary institution. Provide affiliation agreements, if applicable. (see Affiliation Agreement item at the end of this section).

We obtained an onsite 1.5T magnet since last accrediting and so will take all MRI onsite and do not need the previous agreement for support.

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What percentage of the total imaging caseload at the primary institution results in a written imaging report being generated by either the residents or the training radiologist diplomates in this program?

100

What percentage of the preliminary reports generated from the imaging caseload are initially produced by the resident(s) in this program?

85

Does this institution concurrently support the training of diagnostic imaging interns?

No

What percentage of resident-generated reports are reviewed by training diplomates prior to finalization of the report?   80

What is the average turnaround time for resident-generated preliminary reports to be finalized by training diplomates?

48 hours

What percentage of all imaging reports (resident and diplomate generated) is finalized and available to requesting clinicians within 48 hours after the exam is submitted for radiologist consult?   90

Please describe how after-hours/weekend/holidaycases are handled at the primary institution. How does this affectresident-reported imaging caseload?

The university after hours is only for emergency and residents are called in. They can call in their faculty to view images remotely or to come in to help with image acquisition or even moral support. There is always a Diplomate backup.

For each category below, calculate the approximate number of cases that a single resident will <u>interpret at the primary institution with radiologist feedback</u> during the course of the entire residency program. These numbers should be calculated using the annual imaging caseload adjusted to include only those with written reports generated by the residents. In general, this number should then be divided by the total number of residents in a program during a given year.
If external rotations for the resident(s) are employed to increase the resident caseload in any given category, please be sure to upload affiliate agreements that include the expected number of reports that residents can expect to generate (with radiologist feedback) for cases in those categories.

Small animal radiology   6000

Large animal radiology   1000

Abdominal ultrasound   1600

Non-abdominal ultrasound   500

Computed tomography   800

Magnetic resonance Imaging   300

Nuclear scintigraphy   0

How many ultrasound exams will a single resident perform with radiologist supervision and feedback during the course of the entire program? Scans for which the resident writes a report but does not acquire images are excluded.   2000

Do residents in this program have ample hands-on training and practice opportunities to become proficient in the performance of ultrasound guided fine needle aspirates and biopsies?

Yes

Please indicate whether this training program includes formal courses in any of the following topics:

Physics of Diagnostic Imaging

Yes

Radiobiology

Yes

Nuclear Medicine

Yes

Ultrasonography

Yes

Computed Tomography

Yes

Magnetic Resonance Imaging

Yes

Other

No

Briefly describe the formal courses that are available for the resident(s) in this program by indicating the institution, course title, course number, and credit hours as well as any other relevant information. For any topics for which formal course work is not provided for the resident(s), please explain how educational objectives in these topics will be met.

Vet 40430: Diagnostic Radiology Training: 15 credit module.
Covers basic interaction of radiation with matter, physics and image production of
- radiography,
- ultrasound,
- computed tomography,
- Nuclear medicine,
- MRI.

Do residents have access to a majority of the written pathology reports that are generated from patients included in this imaging caseload?

Yes

Will the resident(s) in this program attain an advanced degree (MS, PhD) at the conclusion of the program?

Yes

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Research Environment

Review the Research Requirements listed in the RPE document.

Over the last five years, what is the average number of peer reviewed publications on which the training diplomates (Supervising and Supporting diplomates) of this program are included as authors? (total number of publications in last 5 years among all training diplomates divided by the number of training diplomates)
4

How many peer-reviewed publications are expected of a resident completing the program?
2

If this is an established program, what percentage of residents have made formal research presentations at the annual ACVR or equivalent national meeting?
100

Briefly describe if/how residents are encouraged to engage in investigative work and what mechanisms are in place for training diplomates to support this work.

each year at the beginning of the programme, we discuss any interests with the resident. Once there we meet and offer ideas with the residents, where we engage other specialists in the hospital and university to engage with us. There is a good interdepartmental residency group with fosters collaboration.

Educational Environment

Review the Educational Environment expectations listed in the RPE document.

Please list and enumerate the formal presentations that are expected of each resident during the course of their training. In general, didactic lectures, departmental seminars, scientific presentations, Continuing Education presentations, and similar are considered "formal". Informal topic rounds, journal club, small group teaching (like student rounds), student labs, and similar events should not be included.

Weekly journal club presented 1 in 3 by the resident
three times yearly resident seminar hospital wide to present a topic of their choice.

Briefly describe the type and extent of teaching opportunities that are provided to the resident throughout the training program.

Students are always on rotation and spend time with the resident on the clinic floor.
Residents also teach in the veterinary nursing course at the university in their third year.

Briefly describe the nature and scope of the teaching file available to the resident(s) in this program and how it is maintained/updated.

The European and American combined syllabus notes are sheared between residents.
All cases are available on the PACS and searchable by condition.
There is a teaching file of interesting cases too.
The veterinary library is upstairs from the imaging section

How many Known Case Conferences are conducted annually?
86

Describe the nature and frequency of resident rounds ("other educational events") planned for this program. You may upload an example schedule with the general program schedule that is

requested at the end of this application.

Tuesday is 3D KCC with S. Hoey.
Wednesday is radiographic KCC with E. Tobin
Thursday is book club with S. Hoey and resident mates
Friday is journal club

Describe how the resident(s) in this program will attain direct and consistent medical library access and/or how they will access research tools and medical literature including the suggested references listed in the ACVR Preliminary Examination study guide.

The library is within the same building with the medical school library a 2 minute walk away

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Evaluation and Protection of Residents

For existing programs, list the names, email contact information, and start/end dates of your current residents.

Olga Amoros Carafi
olga.amoroscarafi@ucdconnect.ie
Start July 2020
End July 2024

Did all of your current residents adequately complete the last 6 months of training?

Yes

List the current members of the resident review committee.

Marijke Beltman, Robert Sheils, Cliona Skelly

Describe the internal mechanisms in place at your institution to protect the resident(s) if personal or organizational conflicts arise. Include the management hierarchy for residents and procedures by which residents would report workplace misconduct.

There are multiple meetings between resident and advisor: In rst year there are 4 meetings, in second year 2 meetings, and 3rd and 4th year there are annual meetings. These are progress discussions, with feedback from radiology staff and hospital staff, and feedback compiled and presented to the resident. Progress is commended and defects discussed. The resident notes any concerns and plans are made by the resident or advisor to deal with these concerns. In the event of conflict between resident and advisor, the resident meets with the head of discipline (radiology) or head of section (radiology, anaesthesia and equine) for discussion. There is also a separate student advisor within the veterinary school to support the student resident in cases of conflict.

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Appendix

Please provide the following information regarding preliminary and certifying board exam pass rates for residents in your program over the past five years.

Preliminary Board Exam Pass Rate

2020

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2019

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2018

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2017

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2016

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

Certifying Board Exam Pass Rate

2020

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2019

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2018

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2017

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2016

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

Program Schedule

Upload a schedule for your residents that outlines their clinical and non-clinical work over the course of the residency program. This may be a master schedule or duty roster for your entire radiology section, if desired. If available, an example weekly or monthly rounds schedule can also be included.

Program Schedule

XLSX   2021 example.xlsx

Affiliation Agreements

Upload digital copies of any affiliation agreements that have not been included elsewhere in this document. Refer to the RPE document for an explanation of what information should be included in such agreements.