

ACVR Residency Training Program Application Form:

**The Animal Medical Center/Cornell University Collaborative Residency
In Veterinary Diagnostic Imaging**

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.

II. Objectives:

Provide clinical training in veterinary diagnostic radiology, ultrasound, magnetic resonance imaging, computed tomography, and scintigraphy sufficient to allow graduates successful completion of the ACVR board examination.

III. Training period:

What is the total length of the training program in months? **48**

If this is a 4 year program, during what year will the resident be eligible to take the ACVR Preliminary Exam? **Beginning of the 3rd year**. If the resident is not eligible to take the exam during the beginning of the 3rd year (September), please state the reason.

What is the total duration of supervised clinical training in the program? **33 months**

What are the responsibilities of the resident in the remaining non-clinical portion of the program?

- 1. Self-study and lecture attendance for board-exam preparation**
- 2. Completing a research project**
- 3. Vacation (10 days/year)**
- 4. Externships (optional)**

IV. Direction and Supervision:**Program Director:**

Who is the Director of Residency training? **Anthony J. Fischetti DVM, MS, DACVR**

What percentage of this individual's time is committed to clinical service and teaching of residents? **90%**

Faculty:

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

Roentgen diagnosis:

Faculty: Anthony J. Fischetti DVM, MS, DACVR Margret Thompson, DVM, DACVR (Cornell)
Percentage clinical service: 90% (AMC); 67% (Cornell)

Diagnostic ultrasound:

Faculty: Anthony J. Fischetti DVM, MS, DACVR Amy E. Yeager DVM, DACVR (Cornell)
Percentage clinical service: 90% (AMC); 100% (Cornell)

Computed Tomography

Faculty: Anthony J. Fischetti DVM, MS, DACVR Peter V. Scrivani DVM, DACVR
Percentage clinical service: 90% (AMC); 50% (Cornell)

Magnetic Resonance Imaging:

Faculty: Anthony J. Fischetti DVM, MS, DACVR Peter V. Scrivani DVM, DACVR
Percentage clinical service: 90% (AMC); 50% (Cornell)

Nuclear Medicine:

Faculty: Nathan L. Dykes DVM, MS, DACVR
Percentage clinical service: 75% (Cornell)

List the names and percentage clinical commitment of additional imaging faculty in the program, and their area(s) of instructional responsibility. For each imaging faculty in the program please provide a one page CV documenting their expertise in the area(s) of assigned responsibility.

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

Listed below are **ONLY** those specialists of the AMC. Cornell diplomats are listed elsewhere.

ACVIM

Cathy Langston, Leyenda Harley, Carrie White, Douglas Palma, Jennifer Prittie, Susan Hackner, Susan Meeking, Mark Peterson, Deidre Chiaramonte
Chadwick West (Neurology), Samantha Kegge (Neurology), Nicole Leibman (Oncology), Andrea Flory (Oncology), Anne Hohenhaus (Oncology), John Farrelly (Oncology + DACVR), Betsy Bond (Cardiology), Philip Fox (Cardiology)
At Cornell: Richard E. Goldstein, DVM, DACVIM Thomas J. Divers, DVM, DACVIM, DACVECC

ACVS

Janet Kovak, Marc Havig, Pamela Schwartz
At Cornell: Jay H. Harvey DVM, DACVS Norm G. Ducharme DVM, MSc, DACVS

ACVP
Taryn Donovan, Serena Liu, Sebastian Monette
At Cornell: Sean P. McDonough DVM, DACVP Bradley L. Njaa, DVM, DACVP

V. Affiliation agreement:

If all of the training will not be accomplished on-site, please attach a copy of the affiliations agreement(s). Include the scope of the training and amount of time the resident will be away from the home institution. **See Attached.**

VI. Facilities:

Briefly describe how the program meets the facility requirements.

The facility at AMC:**Radiography - Small Animal:**

- **2 Eklin EDR6 (Canon) DR suites with overhead tube/generator**
- **Seimen's Sireskop digital fluoroscopy suite**
- **Schick digital dental unit.**

Computed Tomography:

- **GE CTi single detector, spiral CT unit.**

MRI:

- **Philips Intera 1.5 T in-house MRI (assorted coils including knee, CTL, head; cardiac gating, vascular study specifications).**

Ultrasound:

- **GE Logiq 9 (with compounding, harmonics, assorted transducers).**

PACS:

- **All imaging studies stored on a Coactiv PACS (in house and distance archiving); DICOM viewing soft ware includes Coactiv and Merge/Efilm; two 3 MP dual-monitor workstations.**

The facility at Cornell:**Radiography—Small Animal:**

- **Philips Easy Diagnost – Radiology/Fluoro with Digital spot films and vascular software.**
- **Pausch 650- radiology room with overhead tube.**
- **Summit Specialist- Radiology room.**
- **Dentex Image 70 – Dentistry**
- **Dental – Sirona (2 units)**

<p>Radiography—Large Animal:</p> <ul style="list-style-type: none"> • Pausch – overhead tube/ 80kw generator • MinX-ray HF 80 – portable unit • Siemens Mobicel Plus - portable unit • SmartGen – portable unit • Kramex - portable unit • Fluoroscanner Premier – Portable fluoroscopy for surgery • Siemens Mobicel – Portable x-ray surgery <p>Computed Radiography: Kodak CR 500 (2 in small, 1 in large)</p> <p>Ultrasonography:</p> <ul style="list-style-type: none"> • ATL 5000 • ATL 3000 • ATL 1000 • Philips IU22 <p>Nuclear Medicine:</p> <ul style="list-style-type: none"> • Technicare Nucam camera • Technicare 438 <p>Both camera’s operate with Nuquest Nuclear Medicine computer</p> <p>MRI: Esaote Vet MR</p> <p>CT: Picker PQS Scanner with Universal Medical Large Animal Table</p> <p>PACS: Kodak DirectView PACS with Web Software/Accessories</p>
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VII. Clinical resources:

<p>Indicate the approximate number of patients seen annually by the home institution? 40,000 (AMC); 20,325 (CU)</p>
<p>What is the annual imaging caseload? 18,584(in 2007AMC); 11,330 (CU)</p>

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

Small animals (canine, feline)	95% (AMC); 78% (CU)
Large animals (equine and food animals)	0% (AMC); 14% (CU)
Exotic animals	5% (AMC); 8% (CU)

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

Small Animal Radiology: 13,365 (AMC); 5,000 (CU)
Large Animal Radiology: 0 (AMC); 1,500 (CU)
Abdominal Ultrasound: 3379 (AMC); 3000 (CU)
Computed Tomography: 430 (AMC); 1,000 (CU)
Nuclear Medicine: 0 (AMC); 100 (CU)
Magnetic Resonance Imaging: 246 (AMC); 300 (CU)
Other (specify): 600 (AMC) 400 (CU) fluoroscopy; 65 (AMC) 30 (CU) radioiodine therapy cats; 499 (AMC) dental radiographs

VIII. Training content:

What percentage of imaging reports are typically available within 48 hours after the examination is conducted in typewritten or electronic form? 60% (AMC); 75% (CU)
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. Because there is only one radiologist available at AMC, “wet read” normal studies will often (~75% of normal studies) not have a formal report. Verbal communication of findings is often sufficient for the primary clinician. However, the resident would not have this as an option. All studies that are supervised (both normals and abnormal) will require a written report.
Of the preliminary reports generated from the imaging caseload what percentage are initially produced by the resident? 70% (AMC); >95% (CU)
What percentage of resident reports are reviewed by the imaging faculty prior to finalization of the report? >98% (both AMC and CU)
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? 0% (AMC); Whereas the preliminary reports are reviewed by at least 1 faculty radiologist, the difficult, challenging or otherwise interesting cases are reviewed in daily rounds with all the faculty and resident radiologists (CU).

Please complete the table below

For AMC, this was calculated by assuming exposure to ~75% of a yearly caseload for each modality, X2.5 years. For CU, this was calculated by taking the previously reported 30-month number and multiplying by 0.33. If it is a modality only offered at CU, the number remained unchanged.	Approximate number of cases in the 30 months clinical experience
Small Animal Radiology:	25,000 (AMC); 1370 (CU)
Large Animal Radiology:	1250 (CU)
Abdominal Ultrasound:	6335 (AMC); 825 (CU)
Computed Tomography:	800 (AMC); 267 (CU)
Nuclear Medicine:	85 (CU)
Magnetic Resonance Imaging:	430 (AMC); 83(CU)
Elective (any of above)	---
Required elective (specify): Echocardiography	40 (CU)
Total	9,075 (CU)

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:

Topic	Course number	Units
Radiobiology:	Basics of Radiobiology Course at Mt. Sinai School of Medicine, NYC	5 credit medical school course

The Physics of:

Diagnostic Radiology:	Physics of Diagnostic Imaging, Cornell Weill Medical College, NYC	5 credit medical school course
Nuclear Medicine:	N/A	

Ultrasonography:	N/A	
CT:	N/A	
MRI:	N/A	
<p>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 attached sheets if necessary. Periodically (approximately quarterly), we engage the residents in a “problem-based learning” exercise. The residents are assigned a problem for which the faculty does not think they have the ability to solve. During the initial meeting – where the problem is assigned – the residents and faculty briefly discuss the problem and identify learning issues, which are based on the ACVR exam objectives. Approximately 1-2 weeks later, the faculty and the residents meet to discuss the problem in depth. Additionally, the residents are actively quizzed on these topics during daily rounds. (AMC and CU)</p>		

IX. Research Environment:

Over the last 5 years, what is the average number of peer reviewed publications, on which the IMAGING faculty listed under Direction and Supervision in IV above, are included as authors? 1 publication per year (AMC); 10 publications per year (CU)
What is the number of publications/submissions expected of a resident completing the program? At least 1 peer-reviewed publication
If this is an established program, what percentage of residents have made formal research presentations at the annual ACVR or equivalent national meeting? N/A
Is an advanced degree a requirement of the training program? No

X. Educational Environment:

How many lectures or scientific presentations are expected of each resident during the course of their training? A minimum of 3 (mainly at AMC, to interns/residents).

XI. Evaluation:

During the program how often is resident performance evaluated in writing? Once annually, both at AMC and CU.
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XII. Teaching File:

<p>What is the nature and scope of the teaching file available to residents?</p> <p>An electronic database of teaching files is available at both AMC and Cornell. At Cornell, individuals may search for imaging exams by patient demographics (age, sex, breed, species), examination (modality, system, date) or other search flags</p>

(etiology, keyword. At AMC, the database can only be searched by examination and body part (thorax, abdomen, musculoskeletal).

How is it maintained/updated? **See above. It is updated daily at both AMC and CU**

XIII. Conferences:

On average how many Known Case Conferences are conducted annually? **26 at CU. 12 at AMC year 2; 45 at AMC year 3.**

XIV. Literature resources:

What is the geographic relationship between the nearest medical library and the training program? **All AMC residents are given full access to the Cornell-Weill Medical Library (6 blocks away); Rockefeller University Library (2 blocks away); and Sloan-Kettering Memorial Library (7 blocks away). AMC also has an in-house veterinary library with bound periodicals dated from the 1960's. The Flower-Sprecher Veterinary Library is located in an attached, adjacent building at CU.**

XV. Appendix:

- (a) 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), check the appropriate box. Complete the table for residents finishing 4 years ago (Year 4), 3 years ago (Year 3), etc.

	Year 5	Year 4	Year 3	Year 2	Year 1
Passed preliminary exam 1st time					
Passed prelim exam 2 nd time					
Passed prelim after 2 nd time					
Passed certifying exam 1 st time					
Passed certifying exam 2 nd time					
Passed certifying exam after 2 nd time					
Unsuccessful in					

all attempts					
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This information from Cornell can be found elsewhere and is not completely relevant to the joint AMC/CU residency.

(b) 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.

Our resident, like our radiologist, are on full time clinic duty 5 days per week, all year. Exceptions are given for vacation and sickness. Residents are also given a few days off for study from time to time, especially prior to examinations. (AMC)

The schedule for first year CU residents is available elsewhere.

Second and third year time at CU will be concentrated in the Equine & Farm Animal Hospital with Companion Animal Hospital duties concentrating in scintigraphy, CT, and MRI. Emergency duty will be as any other 2nd or 3rd year resident (scheduled for one week/month, as with the other residents). One faculty member is assigned to each of the three services. If a faculty member is off-clinics, then the other faculty member is chief for both services. Faculty members are available for consultation during emergency.