

ACVR Residency Training Program Application

Submission Date	2017-01-29 21:43:42
Institution Name:	MedVet Columbus
Succinctly state the objectives of the training program.	Provide clinical training in all modalities of veterinary diagnostic imaging to prepare graduates for successful completion of the American College of Veterinary Radiology board certification examination.
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?	<ol style="list-style-type: none">1. Self-study and board exam preparation2. Attend short courses at other institutions3. Research4. Vacation
Who is the Director of Residency training?	Adam T Watson, DVM, DACVR
What percentage of this individual's time is committed to clinical service and teaching of residents?	90%
Roentgen diagnosis	Jonathan T Shiroma, DVM, MS, DACVR 85%
Diagnostic ultrasound	Jonathan T Shiroma, DVM, MS, DACVR 85%
Computed Tomography	Adam T Watson, DVM, DACVR 90%
Magnetic Resonance Imaging	Adam T Watson, DVM, DACVR 90%
Nuclear Medicine	Adam T Watson, DVM, DACVR 90%
List the names and percentage clinical commitment of additional imaging faculty in the program, and their area(s) of instructional responsibility.	Matthew Baron-Chapman, DVM, DACVR 90% Shared responsibility in all above modalities
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ACVIM	Roger Hostutler
ACVIM	Stephen Martinez
ACVS	Robert Dudley
ACVS	Shawn Kennedy

ACVP	Mark Chalkley
ACVP	Stephanie Corn
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Briefly describe how the program meets the facility requirements.	<p>MedVet Medical and Cancer Centers for Pets in Columbus, OH is a premier multispecialty and emergency practice that was awarded the AAHA-Accredited referral practice of the year in 2014. The radiology department is composed of two board-certified ACVR diplomates and a diagnostic imaging resident. This department plays an essential diagnostic role for the specialty departments, satellite MedVet hospitals in the Midwest and gulf coast regions as well as the referral veterinary community. Through advanced video teleconferencing capabilities, the radiologists and residents at both the Columbus and Cincinnati locations collaborate in didactic residency training including known case conference, journal club, advanced imaging rounds and multispecialty tumor rounds. Through an affiliation with Michigan State University, the resident will be trained in large animal imaging and nuclear medicine via direct visits at set points in the program as well as intermittent collaborative video teleconferencing rounds with the MSU radiology department. IDEXX pathology is located within this campus fostering direct interaction with two clinical pathologists and one anatomic pathologist to correlate imaging findings with disease.</p> <p>Equipment is as follows: MedVet Medical and Cancer Centers for Pets: Columbus</p> <p>Radiology (small animal) Two Sedecal high frequency x-ray machines with Canon DR plates</p> <p>Fluoroscopy GE 9800 digital C-arm fluoroscope</p> <p>Ultrasonography Two GE Logiq 7</p> <p>Computed Tomography GE LightSpeed 16 slice</p> <p>MRI 1.5 Tesla GE Signa Echospeed Plus MRI scanner</p> <p>Michigan State University Radiology (large animal) • Large animal room1: 80kw three-phase generator. Maxiray 100-18 X-ray tube with • Advantx digital fluoroscopy system and Agfa CR system • Large Animal room 2: Mobile Maxiray 75-18N</p> <p>Nuclear Medicine • Gamma Camera: Scintron VI with embedded motion correction from Medical Imaging Electronic</p>
Indicate the approximate number of patients seen annually by the home institution?	45,000
What is the annual imaging caseload?	18,250
	Small Animals (canine, feline): 99% Large Animals (equine and food animals): 13% (MSU) Exotic Animals: 1%

Small Animal Radiology: 14,500
Large Animal Radiology: 900 (MSU)
Abdominal Ultrasound: 3300
Computed Tomography: 350
Nuclear Medicine: 100 (MSU)
Magnetic Resonance Imaging: 600
Other (specify):

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

95%

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

up to 25%

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

100% of imaging reports generated during weekday and the majority of reports from the weekends.

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?

Both faculty are generally not concurrently available to review the radiographic, CT and MRI resident reports. Reports on challenging cases are oftentimes reviewed by both faculty. Ultrasound studies are only be reviewed by one of the faculty.

Small Animal Radiology: 10,000
Large Animal Radiology: 75 (MSU)
Abdominal Ultrasound: 3,000
Computed Tomography: 500
Nuclear Medicine: 10 (MSU)
Magnetic Resonance Imaging: 350
Elective (any of above):
Required elective (specify):
Total:

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 "Upload Files" button to upload additional information as necessary.

At this time, no formal courses will be offered to cover the above objectives. Instead, these objectives will be covered by scheduled topics rounds and organized study modules. A written practice exam will follow each board objective studying period to assess the resident's progress during the 1st and 2nd years. The ACVR board objective notes will serve as a basic framework for studying. Textbooks, journal articles and faculty board studying notes will also be provided for each of the objectives. An outline for studying each board objective is listed below.

Summer/Fall (1st year) – Pathophysiology –The resident will be instructed to reference The Textbook of Veterinary Internal Medicine and Small Animal Cardiovascular Medicine.

Winter (1st year) – Anatomy – Emphasis will be placed on clinical radiographic and cross-sectional anatomy. Study modules using PowerPoint format will be used requiring labeling of images.

Spring (1st year) - Radiobiology – Faculty-driven study modules will be constructed reviewing chapters in Radiobiology for the Radiologist (Hall) and following the ACVR board objectives.

Summer (2nd year) – Physics of Diagnostic Radiology – The resident will be required to read The Essential Physics of Medical Imaging, Vol 3 (Bushberg) and reference Christensen's Physics of Diagnostic Radiology, Vol 4, when applicable. Organized self-study modules will be constructed.

Fall (2nd year) – Special Procedures – The board objectives will serve as a basic framework for studying. Board studying notes will be supplied. Archived echocardiography movie files and notes will be provided for this aspect of the training.

Winter (2nd year) – Alternative Imaging – MRI, CT, ultrasound and nuclear medicine will be covered individually beginning with the physics of each modality and then reviewing the applicable literature/journal articles. Board studying notes will be supplied for each modality. The resident will be expected to read The Handbook of Nuclear Medicine (Daniel) and Diagnostic Ultrasound: Principals and Instruments, 7th edition (Kremkau). Physics of MRI and CT will be covered in The Essential Physics of Medical Imaging (Bushberg). Additionally, the resident will attend the Nuclear Medicine Short Course and MRI short course when offered. Organized self-study modules will be constructed to further training in the physics of these modalities.

After completing each board objective, a written exam will be given to the resident and the results will be discussed.

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?

Adam T. Watson, DVM, DACVR: 3 Jonathan T. Shiroma, DVM, MS, DACVR: 1

What is the number of publications/submissions expected of a resident completing the program?

A minimum of 1 original study will be required. Emphasis will be placed on a prospective study. Additional case reports, review articles and retrospective studies will be encouraged time permitting.

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?	No
How many lectures or scientific presentations are expected of each resident during the course of their training?	Two hospital grand rounds presentations are required per year. Additional imaging topics rounds and continuing education lectures to the local veterinary community will be required. An abstract presentation at the ACVR conference will be required either at the beginning or end of the resident's 3rd year in training.
Did all of your current resident(s) adequately complete the last six months of training?	Yes
List the current members of the residents' review committee.	Adam T Watson, DVM, DACVR
List the internal mechanisms in place to protect your resident if conflicts arise.	The resident has the ability to provide feedback or discuss conflicts to the radiology resident director or MedVet residency committee.
What is the nature and scope of the teaching file available to residents?	<p>A large imaging teaching file has been organized including radiography, special procedures, CT, MRI and ultrasound cases that include cases from all associated MedVet practices where reports are generated and is updated by the Columbus and Cincinnati radiology groups. The file is in Microsoft excel format and is searchable using different coded parameters. All digital images are saved and searchable on a PACS system.</p> <p>MSU collaboration will also allow for exposure to a large animal teaching file. The resident will be required to attend weekly didactic tumor rounds and twice monthly hospital grand rounds. Residents are encouraged to attend cytology and internal medicine rounds on a weekly basis time permitting. Hospital grand rounds are scheduled twice monthly.</p>
How is it maintained/updated?	All digital images are archived on the PACS system for retrieval. Case information is updated using the Excel spreadsheet described above.
On average how many Known Case Conferences are conducted annually?	40
What is the geographic relationship between the nearest medical library and the training program?	The nearest medical library is located approximately 15 minutes from the hospital at The Ohio State University College of Veterinary Medicine. We maintain a large number of both small animal and large imaging textbooks and digital database of journal articles and have electronic access to many applicable journals.

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.

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

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