

ACVR Residency Training Program Application

Submission Date	2017-01-27 16:09:23
Institution Name:	Oregon State University
Succinctly state the objectives of the training program.	<p>The residency program is designed to provide high-quality, in-depth clinical training in the areas of veterinary diagnostic imaging which will allow the resident to develop knowledge and clinical proficiency in the field and adequately prepare them to pass the examinations for ACVR diplomate status. The program will provide a comprehensive understanding of diagnostic radiology, ultrasonography, computed tomography and magnetic resonance tomography as well as knowledge of the general principles and applications of nuclear medicine. The principles of radiation safety and biology and radiotherapy will be emphasized. Residents will rotate through radiology, ultrasound, CT/MRI/Nuclear Medicine. Additional rotations will occur remotely with IDEXX radiologists to provide additional experience telemedicine. The focus of the residency will be on small animals and equine patients; however experience will also be gained with food animals and exotic species. Learning activities scheduled on a daily basis include imaging rounds. Additional learning activities include weekly resident seminar series, known case conference three times per month and journal club once per month. The resident is expected to complete a clinical research project by the end of the second year.</p>
What is the total length of the training program?	48 months
If this is a four year program, during what year will the resident be eligible to take the ACVR Preliminary Exam?	3
What are the responsibilities of the resident in the remaining non-clinical portion of the program?	The off clinic time is for scientific research, completion of an optional Master of Science degree, preparation for board examination and vacation.
Who is the Director of Residency training?	Sarah Nemanic
What percentage of this individual's time is committed to clinical service and teaching of residents?	50
Roentgen diagnosis	Stacy Cooley 70
Diagnostic ultrasound	Stacy Cooley 70
Computed Tomography	Sarah Nemanic 50
Magnetic Resonance Imaging	Sarah Nemanic 50
Nuclear Medicine	Susanne Stieger-Vanegas 15
List the names and percentage clinical commitment of additional imaging faculty in the program, and their area(s) of instructional responsibility.	<p>Constance E. De Haan, DVM, MA, DipACVR Manages the IDEXX telemedicine weeks for the residents, as well as monthly seminars on image interpretation.</p> <p>Note: Susanne Stieger-Vanegas is usually 50% on clinics, but is on sabbatical this year, and in the hospital for 3 months of 2017.</p>

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ACVIM	Jana Gordon
ACVIM	John Schlipf
ACVS	Milan Milovancev
ACVS	Michael Huber
ACVP	Elena Gorman
ACVP	Rob Bildfell
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Briefly describe how the program meets the facility requirements.	<p>Small animal Computed radiography in 2 designated radiography rooms Mobile C-arm (2) for use in surgery suites and interventional cardiac studies 2 Advanced ultrasound system including 3D capability and 6 transducers 1 mobile ultrasound used for post-CT FNA 1 smaller mobile ultrasound (Mylab) designated for small animal emergency service use 64-slice multi-detector row computed tomography with Vitrea work station Nuclear imaging (IS2 gamma camera) with PC based Mirage software 1 Tesla MRI unit Large animal Digital radiography in 1 designated large animal radiography room including a Siemens tube head, ceiling-mounted x-ray tube with linked Bucky. Portable digital radiography system Two portable x-ray units and one high-output mobile unit Mobile C-arm for use in surgery suite Two portable ultrasound machines, each with 2 transducers 64-slice multi-detector row computed tomography with equine table and Vitrea workstation 1 Tesla MRI unit – only available for large animals < 250lb Nuclear imaging (IS2 gamma camera) with PC based Mirage software Both Large and Small Animal Imaging 5 Medical Grade monitor computer work stations equipped with 2-4 Double Black 3MP monitors with Merge eFilm DICOM viewer software PACS image storing system in house and off-site Web-based off-site image access</p>
Indicate the approximate number of patients seen annually by the home institution?	15660
What is the annual imaging caseload?	5200
	<p>Small Animals (canine, feline): 70 Large Animals (equine and food animals): 30 Exotic Animals: 0</p>
	<p>Small Animal Radiology: 2370 Large Animal Radiology: 800 Abdominal Ultrasound: 820 Computed Tomography: 1080 Nuclear Medicine: 17 Magnetic Resonance Imaging: 87 Other (specify): Telemedicine small animal radiographs 400; Musculoskeletal Small animal US 156; fluoroscopy 26</p>

What percentage of imaging reports are typically available within 48 hours after the examination is conducted in typewritten or electronic form?	100
Of the preliminary reports generated from the imaging caseload what percentage are initially produced by the resident?	95
What percentage of the resident reports are reviewed by the imaging faculty prior to finalization of the report?	100
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?	40
	<p>Small Animal Radiology: 5923 Large Animal Radiology: 2000 Abdominal Ultrasound: 2050 Computed Tomography: 2700 Nuclear Medicine: 43 Magnetic Resonance Imaging: 220 Elective (any of above): 2 weeks of Cardiology Required elective (specify): Telemedicine 1800 Total: 10140</p>
Radiobiology	n/a
Nuclear Medicine	Nuc Med Short Course n/a
Ultrasonography	n/a
CT	n/a
MRI	n/a
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.	<p>This material is mostly covered by individual studying followed by mock board exams. Residents have a schedule of 8 mock boards starting in October of the first year and spaced at 3-4 month intervals until June of the year before written boards. The order of exams is Anatomy (October), Radiology/Fluoroscopy Physics (January), Physiology/pathophysiology (April), Ultrasound (July), Special procedures/NM (September), CT/MR (December). Combined Anatomy/Physiology/pathophysiology/ultrasound/nucmed/literature in March and combined physics of all modalities in June.</p> <p>Residents have weekly physics rounds weekly that are attended by a radiologist 1-2 times per month.</p> <p>Residents have monthly Equine MRI interpretation rounds.</p> <p>These topics are also covered in morning resident rounds.</p>

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?	10
What is the number of publications/submissions expected of a resident completing the program?	1
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?	MS is optional
How many lectures or scientific presentations are expected of each resident during the course of their training?	10
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.	Sarah Nemanic Stacy Cooley Susanne Stieger-Vanegas Input is sought from all VTH clinicians and IDEXX radiologists participating in resident training.
List the internal mechanisms in place to protect your resident if conflicts arise.	<p>As residency director, I have an open door policy in which they can come see me about anything they wish to discuss. When there are issues that need to be addressed with other faculty members and their interaction with the resident, I go to the Department Chair for advice or action.</p> <p>The hospital director, Chair of the Department of Clinical Sciences and dean of the College of Veterinary Medicine have an open door policy in which residents can seek to discuss conflict or any grievances.</p> <p>When residents choose to enroll in the Master's program, only one of the three in house radiologists serves on their graduate committee, so that they can go to the other radiologists if there is a problem.</p>

What is the nature and scope of the teaching file available to residents?

Clinical images since 2005 are in a digital format and are available through the PACS system and the Veterinary Hospital System. A search function is part of the Veterinary Hospital Information System that allows all digital radiology reports to be searched for keywords in either the findings or interpretation sections of the reports. Interesting, unusual and teaching cases can also be indexed by keywords that can be searched in the Veterinary Hospital System and can be filtered as "teaching files". These cases are directly linked to the PACS system for web-based image retrieval. A film archive of interesting cases and artifacts is also available on-site. The film archive is sorted by patient ID and log sheets are available. The film archive includes the 20 years prior to 2005.

How is it maintained/updated?

The teaching file is updated by faculty and technologists by adding keywords during image acquisition, report generation and report finalization. The artifact files are maintained by the faculty and technologist. The film archive is maintained by technologists.

On average how many Known Case Conferences are conducted annually?

36

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

The McDowell Library is in the building, on-site. All relevant veterinary journals are available online or on-site through the library. Most reference books are available in the radiology reading room, those how are not in the radiology library can be found in the library of the College of Veterinary Medicine. An on-site scan and deliver service for articles not available via online or on-site retrieval is available to the resident.

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					n/a
Passed preliminary exam 2nd time					n/a
Passed preliminary exam after 2nd time					n/a
Passed certifying exam 1st time					n/a
Passed certifying exam 2nd time					n/a
Passed certifying exam after 2nd time					n/a
Unsuccessful in all attempts					n/a

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