

ACVR Residency Training Program Application

Submission Date	02-19-2018 16:31:27
Institution Name:	Va Tech
Succinctly state the objectives of the training program.	<ol style="list-style-type: none">1. Train residents in the basics of radiobiology, radiation physics, radiation safety2. Help residents develop clinical skills in diagnostic radiology in both large and small animal patients, utilizing both routine radiographic examinations and special procedures.3. Train residents in principles and clinical applications for ultrasound, computed tomography, magnetic resonance imaging, and nuclear medicine.4. Help residents develop skills in design, data collection, data analysis, and publication of a research project
What is the total length of the training program?	4 years
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 resident is on clinical duty throughout the 4 year program. However, 24 weeks of this 4 year period are designated as off-clinic time, and are used for research and scholarly activity, as well as boards preparation.
Who is the Director of Residency training?	Martha Larson
What percentage of this individual's time is committed to clinical service and teaching of residents?	85%
Roentgen diagnosis	Martha Larson 85%
Diagnostic ultrasound	Martha Larson 85%
Computed Tomography	Kemba Clapp 85%
Magnetic Resonance Imaging	Jeff Ruth 85%
Nuclear Medicine	Greg Daniel 2%
List the names and percentage clinical commitment of additional imaging faculty in the program, and their area(s) of instructional responsibility.	Dr. Daniel is currently acting Dean, but still participates in the residency program, primarily in the area of nuclear medicine.
	Larson CV Resid accreditation.docx

ACVIM	David Panciera
ACVIM	David Grant
ACVS	Otto Lanz
ACVS	Robert Gilley
ACVP	Tom Cecere
ACVP	Kurt Zimmerman
Briefly describe how the program meets the facility requirements.	<p>All radiographic imaging systems are digital, using the Eklin DR System</p> <p>Radiology: SA Siemens Multix-Pro Polydoros SX 65, Shimadzu YSF-120 Digital R/F System (this is being replaced in June, 2018, with Philips R/F)</p> <p>Radiology: LA Electromed SMI EDEC Minxray HF 100/300 GE AMX 4 Plus mobile X-ray unit Siemens Siremobil C-arm, (this is being replaced with Philips C-arm in June, 2018)</p> <p>Ultrasound: 2 Philips IU-22 units Universal MyLab 30 and 50 (Large animal US) Bioscan (Intensive Care Unit and Medicine ward)</p> <p>Computed Tomography: Toshiba Aquilion16 CT System</p> <p>MRI 1.5T Philips Intera MRI.</p> <p>Nuclear Medicine Nucam II Gamma Camera with Mirage Imaging Computer and NucLear MAC Imaging Software</p> <p>All imaging systems connected to Sound/Antech PACS system</p>
Indicate the approximate number of patients seen annually by the home institution?	15,100
What is the annual imaging caseload?	7733
	<p>Small Animals (canine, feline): 95.5%</p> <p>Large Animals (equine and food animals): 4%</p> <p>Exotic Animals: 0.5%</p>

Small Animal Radiology: 3650
Large Animal Radiology: 300
Abdominal Ultrasound: 2700
Computed Tomography: 620
Nuclear Medicine: 53
Magnetic Resonance Imaging: 410
Other (specify):

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.

Our imaging caseload in exotics is very low, so cases are supplemented with cases from previous institutions, and are incorporated into KCC frequently. Our residents frequently attend LA ultrasound procedures in the large animal section, as most are not done primarily by radiology

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?

90%

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

100% (unless chief resid)

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?

90%

Small Animal Radiology: 7300
Large Animal Radiology: 600
Abdominal Ultrasound: 5400
Computed Tomography: 1240
Nuclear Medicine: 200
Magnetic Resonance Imaging: 820
Elective (any of above):
Required elective (specify):
Total:

Radiobiology

BMVS 6094 1

Nuclear Medicine

BMVS 1

Ultrasonography

BMVS 6094 1

CT

BMVS 6094 1

MRI

BMVS 6094 1

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.

BMVS 6094 is a formal course offered in the spring and fall semesters during years 1,2, and 3, in which principles of radiobiology, physics of radiology, special contrast procedures and alternate imaging are covered, using the textbooks The Essential Physics of Medical Imaging (Bushberg), Radiological Science for the Technologist (Bushong), Textbook of Nuclear Medicine (Daniel/Berry) and Radiobiology for the Radiologist (Hall). Other references, such as journal articles are used as supplemental reading as needed. 1 credit hour per semester. These courses are graded (not P/F) with midterm and final exams given each semester.

BMVS 6064: Journal Club Weekly review of current and pertinent articles from the biomedical literature. 1 credit hour per semester.

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?

3/faculty member

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?

Yes: masters degree

How many lectures or scientific presentations are expected of each resident during the course of their training?	6-7 (includes seminars)
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.	Martha Larson Jeff Ruth Krystina Stadler (leaving in March 2018) Kemba Clapp Greg Daniel
List the internal mechanisms in place to protect your resident if conflicts arise.	<p>Conflicts/concerns are initially addressed by the section chief (Larson), with consensus from other radiology faculty members. Section chief has the final responsibility, and any faculty members directly involved in any conflict are recused.</p> <p>If concerns are not adequately addressed, it is taken to the Department Head.</p> <p>Excellent counseling services are available in the VTH, and on main campus if necessary.</p>
What is the nature and scope of the teaching file available to residents?	Lists of good cases are maintained electronically. In addition, individual faculty and residents have lists of good cases that are shared in a folder on a local server
How is it maintained/updated?	Both faculty and residents add cases to the folder.
On average how many Known Case Conferences are conducted annually?	17 (every 3 weeks)
What is the geographic relationship between the nearest medical library and the training program?	Veterinary Medical Library is located in the same building complex in which the Clinic is housed. Newman Library is the university library, and is located approximately 0.5 miles away.

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	x		x		
Passed preliminary exam 2nd time					x
Passed preliminary exam after 2nd time					
Passed certifying exam 1st time	x		x		
Passed certifying exam 2nd time					
Passed certifying exam after 2nd time					
Unsuccessful in all attempts					

[Rad Sched 2017-18 v11.xlsx](#)