

# 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) 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.*

## ACVR Residency Training Program Application

### 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.

<b>Institution Name</b>	MedVet Salt Lake City
<b>Residency Program Director Name</b>	Dainna Stelmach
<b>Residency Program Director Email</b>	dainna.stelmach@gmail.com

### 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?**

Monday, July 15, 2024

### Objectives

**Succinctly state the objectives of the training program.**

To provide clinical training in veterinary diagnostic imaging, including small animal radiology, ultrasound, computed tomography, fluoroscopy, magnetic resonance imaging and to a lesser extent, nuclear medicine and large animal and exotics radiology, with the goal of preparing the resident for successful completion of the ACVR board examination and to work in either private practice, teleradiology or in an academic institution.

## Training Period

What is the total length of the training program? 36

What is the anticipated length of supervised clinical training a resident will experience during this program? 33

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 off-clinics time will be dedicated to self study in preparation for the ACVR Board examination. The resident will also be expected to develop and conduct a research project under the guidance of one or more radiologists and/or specialists, with the goal of submitting an abstract to present at the ACVR Scientific Meeting and writing a manuscript for submission in a peer-reviewed veterinary journal. The resident will also have out-rotations in large animal diagnostic imaging +/- nuclear medicine.

## ACVR Residency Training Program Application

### 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? 90

How many weeks per year will the Residency Director be on clinical service and teaching residents at the primary training institution? 47

## ACVR Residency Training Program Application

### 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: Angela Gorney	Hours/Year: 800
Specific Areas and/or Limitations of Instructional Responsibility: Predominantly Small Animal MRI, CT, Radiographs and Ultrasound	
Institution: MedVet Salt Lake City and MedVet Northern Utah	

**Please list all training diplomates who will act as Supporting Diplomates of this residency program. Indicate how many hours per year each Supporting Diplomate will be scheduled on clinical duty with primary support of residents and any specific areas of instructional responsibility and/or limitations in the scope of this support (e.g. only trains residents in ultrasound, does not participate in large animal training, does not finalize imaging reports, etc).**

Name: Dainna Stelmach	Hours/Year: 1000
Specific Areas of Instructional Responsibility: Small Animal Radiographs, Ultrasound, MRI and CT with some exotics/zoo animal	
Institution: MedVet Salt Lake City	

Name: Angela Gorney	Hours/Year: 500
Specific Areas of Instructional Responsibility: Small Animal radiographs, ultrasound, CT and MRI	
Institution: MedVet Salt Lake City and Northern Utah	

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.

<b>ACVIM Member Name</b>	Liz Lee
<b>ACVIM Member Institution</b>	MedVet Salt Lake City
<b>ACVIM Member Email</b>	liz.lee@medvet.com
<b>ACVS Member Name</b>	Christina Boekhout
<b>ACVS Member Institution</b>	MedVet Salt Lake City
<b>ACVS Member Email</b>	christina.boekhout@medvet.com
<b>ACVP Member Name</b>	Mark Chalkley
<b>ACVP Member Institution</b>	IDEXX
<b>ACVP Member Email</b>	mark-chalkley@idexx.com

**Upload any affiliation agreement(s) with Supervising Diplomates, Supporting Diplomates, or Diplomates in other specialties that are located at external institutions. (see Affiliation Agreement section at the end of this application.) Refer to the RPE document for an explanation of what information should be included in such agreements.**



Pathology Support Agreem... .docx

## ACVR Residency Training Program Application

### Resident:Supervising Diplome 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

## ACVR Residency Training Program Application

### 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?

<b>Digital or Computed Radiography</b>	Yes
<b>Fluoroscopy</b>	Yes
<b>Ultrasound with Doppler Capability</b>	Yes
<b>MRI</b>	Yes
<b>Fan-beam CT</b>	Yes
<b>Nuclear scintigraphy</b>	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)**

This facility provides adequate space, equipment, and other pertinent facilities to ensure an effective educational experience for residents in veterinary radiology. There is on site access to modern diagnostic imaging equipment, including digital computed radiography, fluoroscopy, ultrasound (including Doppler), MRI and CT.

MRI installed in 2021: Siemens 1.5 T Magnetom Avanto A Tim+Dot System

CT Installed in 2023: Siemens Somatom go.Up, 70 cm bore, 50cm FOV, 32 Acquired slices/ 64 reconstruction slices

Ultrasound purchased in 2020: GE Logiq e 10 with microconvex, low frequency convex, linear and high frequency linear probes.

2 Radiology suites installed in 2020: Innovet Select HF

A Fluoroscopy suite was installed in 2020: Siemens Cios Select C arm

Large animal radiology rotation/s through The Ohio State University Veterinary Medical Center (1-2 weeks in the second year +/- possibly 1-2 weeks in the third year)

**Upload any affiliation agreement(s) required for training residents in the above core modalities of-site or otherwise outside of the primary institution. Refer to the RPE document for an explanation of what information should be included in such agreements.**



OSUMedVetSLC agreement.pdf

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

Radiography: The resident will spend the first 2 weeks on radiology participating in image acquisition in order to optimize radiographic technique and proper positioning. The resident will help with radiograph image acquisition when requesting specific views or when correcting inappropriate positioning or technique.

Fluoroscopy: The resident will be directly involved in fluoroscopic examinations and procedures with the Internal Medicine and Surgery Departments when possible.

MRI and CT : : The resident will be involved in image acquisition, protocol setup with the designated technician and study interpretation for all studies when on CT and MRI rotations.

Ultrasound: The resident will perform most ultrasound examinations when on ultrasound rotations (under radiologist supervision as needed).

## ACVR Residency Training Program Application

### 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.**

30000

**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.**

18000

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

<b>Small animal radiology</b>	20000
<b>Large animal radiology</b>	0
<b>Abdominal ultrasound</b>	5000
<b>Non-abdominal ultrasound</b>	400
<b>Computed tomography</b>	800
<b>Magnetic Resonance Imaging</b>	200
<b>Nuclear scintigraphy</b>	0
<b>Other (Specify)</b>	Fluoroscopy: 50

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

Small animals (canine, feline): 99

Large animals (equine, bovine, porcine, etc.): 0

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**

No

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

Yes

**Food/fiber animal imaging**

No

**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).**

The resident will register for the LADIS large animal imaging course. They will have the opportunity to attend an out-rotation dedicated to large animal imaging in year 2 prior to the ACVR Qualifying Examination and year 3 prior to the certifying examination. The resident may also attend the Nuclear Medicine Short Course, either in person or virtually.

## **ACVR Residency Training Program Application**

**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?** 98

**If < 99%, please provide a brief explanation and account for this when calculating the number of cases that each resident will interpret.**

The surgery department does not submit all orthopedic post operative radiographs for interpretation. In addition, some positioning radiographs from catheters, feeding tubes etc... are not submitted for interpretation.

**What percentage of the preliminary reports generated from the imaging caseload are initially produced by the resident(s) in this program?** 65

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

**If yes, indicate the maximum number of imaging interns the institution will train concurrently, what percentage of the preliminary reports generated from the imaging caseload will be initially produced by the intern(s), and how this affects the resident imaging report caseload.**

1-2 Imaging interns may be training concurrently. They will perform approximately 50% of reports for a given modality rotation/s, which will be different rotations from the residents. Therefore this should not take away from the number of cases that the resident may see.

**What percentage of resident-generated reports are reviewed by training diplomates prior to finalization of the report?** 99

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

The majority of resident-generated preliminary reports will be finalized within 24-48 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?** 95

**Please describe how after-hours/weekend/holiday cases are handled at the primary institution. How does this affect resident-reported imaging caseload?**

After hours radiographs may be read the following morning depending on the time. Some are submitted to an outside teleradiology company such as IDEXX depending on urgency. Weekend and holiday coverage is rotated between MedVet and VetRad Radiologists across the country. The resident would be expected to work some holidays (at least 2 Federal Holidays) and may be on call some weekends with a radiologist as backup. Ultrasound, CT and MRI after hours and weekends. When on call, they will help perform and interpret these studies with the backup of one of the radiologists.

For each category below, calculate the approximate number of cases that a single resident will interpret at the primary institution with radiologist feedback 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** 10000

**Large animal radiology** 0



<b>Abdominal ultrasound</b>	1000
<b>Non-abdominal ultrasound</b>	100
<b>Computed tomography</b>	200
<b>Magnetic resonance Imaging</b>	100
<b>Nuclear scintigraphy</b>	0
<b>Other (specify)</b>	Fluoroscopy: 15

**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.**

1100

**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

**Upload any affiliation agreement(s) that are in place to support the resident caseload in modality, case number, species, etc. Refer to the RPE document for an explanation of what information should be included in such agreements.**



221\_OSUMedVetSLC agreem... .pdf

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

**Physics of Diagnostic Imaging**

No

**Radiobiology**

Yes

**Nuclear Medicine**

Yes

**Ultrasonography**

No

**Computed Tomography**

No

**Magnetic Resonance Imaging**

No

**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.**

Formal courses are not provided, however the resident will have an assigned self-study schedule during the residency training, under supervision and guidance of one or more radiologists. The resident will follow the ACVR Study Guidelines/learning objectives and be given mock exams .

Mock Examinations are as follows:

Anatomy

Physics

Radiation Protection and Biology

Ultrasound:

Special Procedures:

Nuclear Scintigraphy:

MRI and CT:

Nuclear Medicine short course online or in person and in person radiation biology rounds with our on site Radiation Oncologist

**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?**

No

## **ACVR Residency Training Program Application**

### **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)**

0

**How many peer-reviewed publications are 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?**

**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.**

The residents will be expected to develop and conduct a research project on the guidance of one or more radiologist (and/or other specialists), with the goal of submitting an abstract to the ACVR Scientific Meeting and writing a manuscript for submission in a peer reviewed veterinary journal. There will be up to three months total designated off clinics time for research/writing during the residency.

MedVet's Director of Post-Graduate Medical Education & Clinical Studies is responsible for developing, managing, and growing MedVet's Clinical Studies Program. They are tasked with creating and fostering relationships with our research sponsors, providing oversight and support for our clinical trials, and identifying and securing new research opportunities that allow MedVet to continue advancing the veterinary profession and providing the highest level of care.

## **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.**

The residents are expected to present their research project at the ACVR annual conference. They will be expected to present one to two local continuing education lectures to general practitioners, students and emergency doctors.

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

Through our Emergency Clinician Mentor Program, there is the opportunity and expectation to teach ECMP doctors rotating through our service. In the future, when our Internship program is resumed (estimated for 2025), our residents will also help with teaching of the rotating interns when on our service. When veterinary students are on our service, the residents will also help to teach students. Our hospital will be a 4th year clinical rotation site for Utah State University College of Veterinary Medicine when they are approved by the AVMA's Council on Education.

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

There is an extensive list of interesting cases for teaching/review that are saved on an available excel file.

**How many Known Case Conferences are conducted annually?**

**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.**

MedVet KCC: First Tuesday of every month - exam at 5:00am, review at 6:00am Mountain time  
MedVet KCC: Second Tuesday of every month - exam at 5:00am, review at 6:00am mountain time  
OSU Equine Rounds: Third Tuesday of every month - 6:00am  
MedVet Radiology Journal Club: Fourth Tuesday of every month - 6:00am

University of Tennessee MRI Rounds: Every Wednesday - 5:00am  
MedVet SLC Topic Rounds/Journal Club: Every Wednesday - 7:00am

Residents and Interns Book Club: Every other Thursday - 5:30am  
Residents and Interns Journal Club: Every other Thursday - 5:30am

MedVet Tumor Rounds: First Thursday of every month - 6:00am  
MedVet Tumor Rounds: Second Thursday of every month - 6:00am  
MedVet A&E Rounds: Third Thursday of every month - 6:00am  
MedVet M&M Rounds: Fourth Thursday of every month - 6:00am

MedVet Cincinnati Echocardiography Rounds: Fourth Friday of every month - 6:00am

**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.**

There is an extensive library of books in Radiology reading room. There is also access to pertinent Veterinary Medical Journals via <https://spot.medvet.com/journals/>

## ACVR Residency Training Program Application

### Evaluation and Protection of Residents

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

N/a

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

No current residents

**List the current members of the resident review committee.**

Dainna Stelmach, DVM, MS, DACVR  
Jon Congdon, DVM, MS, DACVAA  
Liz Lee, DVM, DACVIM (Small Animal Internal Medicine)  
Jordan Scherk, DVM, DACVECC

**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.**

At any point, should conflicts arise, the hierarchy and available persons of contact would be as such; resident director, Medical Director, Regional MD, Director of Post-Graduate Education, Chief Medical Officer, HR partner.

## ACVR Residency Training Program Application

### 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:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2019**

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2018**

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2017**

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2016**

Number Of Prelim Board Eligible Residents: 0

Number of Residents That Took Prelim Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

## **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:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2019**

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2018**

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

**2017**

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt:  
NA

Number of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

Number of Certifying Board Eligible Residents: 0

Number of Residents That Took Certifying Exam: 0

Number of Residents That Passed On 1st Attempt:  
NANumber of Residents That Passed After Multiple  
Attempts: NA

Number of Residents That Have Not Passed: NA

## 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



MedVet Salt Lake City Diag... .docx

## 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.