ACVR | Diagnostic Imaging

Tuesday, January 16, 2024

# 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.

| | |
|---|---|
| **Institution Name** | University of Pennsylvania |
| **Residency Program Director Name** | Wilfried MAI |
| **Residency Program Director Email** | wmai@vet.upenn.edu |

## 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.**

1. To provide basic science and clinical training in small and large animal imaging modalities of radiology, ultrasound, nuclear medicine, computed tomography and magnetic resonance imaging.
2. To fulfill the residency training requirements of the American College of Veterinary Radiology so that the resident is eligible to become ACVR certified as a clinical specialist (veterinary radiologist) and can practice successfully in either an academic or specialty practice.

3. This is a 4-year program, however the examination schedule and supervised portion of the training are identical to any 3-year program over the first 3 years; The residents are scheduled to take the preliminary examination at the beginning of their 3rd year, and the certifying examination at the beginning of their 4th year. During the 4th year, they function more independently as junior instructors.

## Training Period

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

**What is the anticipated length of supervised clinical training a resident will experience during this program?** 30

**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?**

Time off-clinics is used for ACVR Board preparation, clinical research project if applicable, optional external rotations and vacation.

# 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?** 60

**How many weeks per year will the Residency Director be on clinical service and teaching residents at the primary training institution?** 48

# 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: Jennifer REETZ

Hours/Year: 1128

Specific Areas and/or Limitations of Instructional Responsibility: Small Animal Imaging

Institution: University of Pennsylvania (Ryan Veterinary Hospital)

Name: Yael PORAT-MOSENCO

Hours/Year: 744

Specific Areas and/or Limitations of Instructional Responsibility: Small Animal Imaging

Institution: University of Pennsylvania (Ryan Veterinary Hospital)

Name: Alessia CORDELLA

Hours/Year: 936

Specific Areas and/or Limitations of Instructional Responsibility: Small Animal Imaging

Institution: University of Pennsylvania (Ryan Veterinary Hospital)

Name: Robert SLATER

Hours/Year: 564

Specific Areas and/or Limitations of Instructional Responsibility: Small Animal Imaging

Institution: University of Pennsylvania (Ryan Veterinary Hospital)

Name: Kate WULSTER

Hours/Year: 880

Specific Areas and/or Limitations of Instructional Responsibility: Large Animal Imaging

Institution: University of Pennsylvania (New Bolton Center)

Name: Timothy MANZI

Hours/Year: 440

Specific Areas and/or Limitations of Instructional Responsibility: Large Animal Imaging

Institution: University of Pennsylvania (New Bolton Center)

Name: Elizabeth ACUTT

Hours/Year: 880

Specific Areas and/or Limitations of Instructional Responsibility: Large Animal Imaging

Institution: University of Pennsylvania (New Bolton Center)

Name: Cristobal NAVAS DE SOLIS

Hours/Year: 936

Specific Areas and/or Limitations of Instructional Responsibility: Large Animal Ultrasound

Institution: University of Pennsylvania (New Bolton Center)

| | |
|---|---|
| Name: Katherine CHOPE | Hours/Year: 900 |
| Specific Areas and/or Limitations of Instructional Responsibility: Large Animal Ultrasound | |
| Institution: University of Pennsylvania (New Bolton Center) | |

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.

| | |
|---|---|
| **ACVIM Member Name** | Beth CALLAN |
| **ACVIM Member Institution** | University of Pennsylvania |
| **ACVIM Member Email** | callan@vet.upenn.edu |
| **ACVS Member Name** | David HOLT |
| **ACVS Member Institution** | University of Pennsylvania |
| **ACVS Member Email** | dholt@vet.upenn.edu |
| **ACVP Member Name** | Charles BRADLEY |
| **ACVP Member Institution** | University of Pennsylvania |
| **ACVP Member Email** | cbradle2@vet.upenn.edu |

# ACVR Residency Training Program Application

## Resident:Supervising Diplomate 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?** | 8 |

# 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?

| | |
|---|---|
| **Digital or Computed Radiography** | Yes |
| **Fluoroscopy** | Yes |
| **Ultrasound with Doppler Capability** | Yes |
| **MRI** | Yes |
| **Fan-beam CT** | Yes |
| **Nuclear scintigraphy** | Yes |

**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)**

AT THE RYAN VETERINARY SMALL ANIMAL HOSPITAL:

1. Diagnostic Radiology (2 rooms):

o Room #1: General Electric Proteus XR/a (65 kW, 800 mA, 150 kVp) high frequency generator with automatic exposure control; MX100 X-ray tube with double focus (0.6/1.25 mm), anode angle 12.5 degrees; Proteus XR/a elevating, four-way float radiographic table; XR/a automatic collimator, color LCD Touch Screen operator console.
Detector: Sound SmartDR+ CsI.

o Room #2: Precision™ 600FP flat panel detectorbased fluoroscopic and radiographic system with AeroDR XE 17x17 cassette sized wireless digital flat panel detector, AeroDR Docking Station II, CS-7 Universal Control Station Hardware.

2. Radiology reading room:

o SECTRA PACS system (Shared with New Bolton Center Large Animal Hospital)

o Empiric RIS system

o 4 workstations with dual medical grade Barco® monitors (Barco MDNC-3421 3MP Radiology Display)

o 3 workstations with Dell monitors for Ultrasound/CT/MRI

o Extra large ClearTouch® Smart Display for rounds and KCC presentations (86" 6000K Series Interactive Panel with USB HID / AGG / 20 Points of Touch - Ultra HD monitor).

3. Computed Tomography:

o GE Healthcare Revolution Maxima 128-slice CT machine with cardiac gating.
o AW VolumeShare7 with 2 Monitors (Vessel IQ Express, AutoBone Express, VolumeViewer)

o Floor mounted dual head power injector (Medrad® Stellant® Flex® Pedestal CT Injection System)

4. Ultrasound:

o 1 x GE Healthcare Logiq e10 Ultrasound machine with spectral, color flow and power Doppler capability, B-flow, harmonic imaging. C2-9-D and C3-10-D Premium Probe Bundle; ML6-15-D and L6-24-D Premium Probe Bundle; ML 4-20-D XD-clear broad-spectrum linear probe.

o 1 x Philips Epiq 5G Ultrasound machine (EPIQ Software Release 9.0 SW Plus) with spectral, color flow and power Doppler capability, Contrast Ultrasound imaging, iScan, Autoscan, Vascular High-Q Automatic Doppler, AutoDoppler flow optimization, Tissue Harmonics and Pulse Inversion Harmonic imaging. Transducers: eL18-4, C8-5, C9-2 and mC12-3.

5. Magnetic Resonance Imaging:

o 1.5T GE Healthcare SIGNA EXPLORER
o Coils: HD CTL Spine Array (12-element); 16-channel Flex Suite, Premium (Small, Medium & Large) with Positioner; 12-element HD Body Array
o Standard pulse sequence packages for neurologic, musculoskeletal, abdominal and cardiac applications (including cardiac gating).
o GE Signa workstation, Software version 25.1 6.

6. Radiation Oncology: Varian linear accelerator with IMRT capabilities.

**********

AT THE NEW BOLTON CENTER LARGE ANIMAL HOSPITAL:

1. Diagnostic Radiology:

o 2 x Sound NEXT wireless DR systems
o 3 x Vet Rocket X3 wireless DR systems
o 1 x Vet Rocket X1 wireless DR system
o 1 x Vet Rocket CX1 wireless DR system
o 1 x Sedecal HF 100 KW generator, Varex (Varian) RAD 92 x-ray tube
o 4 x diagnostic imaging viewing stations

2. Computed Tomography:

o Robotic Cone Beam CT: 1 x Varex x-ray tube (G892 / B147 housing); 1 x Varex XRD4343RF detector; Orimtech CBCT AceClubs acquisition/reconstruction software; 1 x CPI Indico IQ 100KW generator; 2 x ABB IRB 6700 robots

o Fan Beam CT: Neurologica OmniTom

3. Nuclear Medicine: Rapid Scan gamma camera; Secondary in-floor Rapid Scan gamma camera; Oasis acquisition / image processing software.

4. Magnetic Resonance Imaging: Esaote O-scan (0.31T) using MRI EVOlution acquisition software

5. PET: LONGMILE MILE-PET standing PET scanner using proprietary acquisition / fusion software.

6. Ultrasound:
o 2 x Canon Aplio i700
o 1 x GE Vivid E95
o 1 x GE Vivid iQ
o 1 x GE LogiqE
o 2 x Sonosite Edge II
o 1 x Sonoscape S9

o 1 x Samsung HM70 EVO
o 1 x Samsung Lumify point of care US

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

On the X-ray floor, the residents are in charge of quality control of radiographs obtained by our technologists; on complex cases they provide direct supervision for specific projections; they are also hands-on running the fluoroscopic unit for real time examinations and contrast studies.
On ultrasound, the residents perform ultrasound examinations independently and then their attending board-certified radiologists performs a back-scan to verify their findings; if the resident has trouble during their examination, the attending radiologist is in the room to provide direct recommendation or hands-on assistance.
On CT and MRI, the residents are with the techs in the control room and provide real-time technical instructions to the technologists for the studies being obtained, discussing the protocol with their senior radiologist who is physically present with them in the room. They perform real time quality control on imaging material and approve of studies being completed by the technologists, after consulting with their attending.

# 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.** | 37700 |
| **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.** | 17138 |

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

| | |
|---|---|
| **Small animal radiology** | 5900 |
| **Large animal radiology** | 3500 |
| **Abdominal ultrasound** | 4150 |
| **Non-abdominal ultrasound** | 1400 |
| **Computed tomography** | 1250 |
| **Magnetic Resonance Imaging** | 565 |
| **Nuclear scintigraphy** | 300 |

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

Small animals (canine, feline): 75

Large animals (equine, bovine, porcine, etc.): 24

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** Yes

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

**Food/fiber animal imaging** Yes

**Exotics imaging** Yes

**Teleradiology/Referral imaging** No

**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).**

We currently do not have a Special Species clinical service at PennVet therefore their direct exposure to these species is reduced and mostly through the zoo animals that come get imaging at our institution. However, we have a large bank of imaging cases (Radiographs, Ultrasound, CT) of special species (birds/small mammals/reptiles) that are available in our PACS system that they use for training and exposure. There is no current exposure to teleradiology in our program. However several of our staff members have a regular activity in teleradiology and provide feedback during rounds on how to handle some aspects of reporting in the world of teleradiology.

# 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?** 99

**What percentage of the preliminary reports generated from the imaging caseload are initially produced by the resident(s) in this program?** 80

| | |
|---|---|
| **Does this institution concurrently support the training of diagnostic imaging interns?** | No |
| **What percentage of resident-generated reports are reviewed by training diplomates prior to finalization of the report?** | 100 |

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

6 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?** | 100 |

**Please describe how after-hours/weekend/holidaycases are handled at the primary institution. How does this affectresident-reported imaging caseload?**

1st to 3rd year residents have primary on-call and week end duty with primary responsibility on the emergency cases; while on call they provide phone consultation to the emergency clinicians, and are writing preliminary reports for all cases they scan or interpret. The weekday overnight reports are finalized the following morning by the attending radiologist and the week end cases are finalized on Monday morning.
During the first 6 months of their residency, the 1st year residents have direct back up by a 4th year senior resident (who are typically board-certified by that time). After the first 6 months, they have primary on call duties and if facing a difficult case, they are instructed to place a group call to the senior residents and board-certified radiologists to request for help.

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** | 3600 |
| **Large animal radiology** | 400 |
| **Abdominal ultrasound** | 1700 |
| **Non-abdominal ultrasound** | 40 |
| **Computed tomography** | 325 |
| **Magnetic resonance Imaging** | 220 |
| **Nuclear scintigraphy** | 10 |

| | |
|---|---|
| **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.** | 1800 |
| **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 |

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

| | |
|---|---|
| **Physics of Diagnostic Imaging** | Yes |
| **Radiobiology** | Yes |
| **Nuclear Medicine** | Yes |
| **Ultrasonography** | Yes |
| **Computed Tomography** | Yes |
| **Magnetic Resonance Imaging** | Yes |
| **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.**

At the Hospital of the University of Pennsylvania:
Human radiology residents X-ray physics and radiobiology: 18 hours
Human radiology residents CT physics and instrumentation: 5 hours
Human radiology residents Ultrasound physics and instrumentation: 5 hours
Human radiology residents MRI Physics and instrumentation: 14 hours

Additional courses @PennVet include (1st year of training):
Large Animal Diagnostic Imaging Equine Lameness Equine Orthopedics

When offered, the residents also attend additional course such as the CT course, LADi course, Brain camp, etc.

| | |
|---|---|
| **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)** 7

**How many peer-reviewed publications are expected of a resident completing the program?** 0

**If this is an established program, what percentage of residents have made formal research presentations at the annual ACVR or equivalent national meeting?** 30

**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.**

A research project is not required in this program, but is encouraged. If a resident has interest in research he is supported in this endeavor by first identifying/tweaking an idea of her own, or is being offered suggestions for feasible projects. Then the resident is asked to produce a research outline that is discussed with the research mentor and to then proceed with data collection/interpretation and writing of the manuscript. Some residents are also involved in collaborative projects with investigators in other departments where they participate in data collection and generation.

## 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.**

4

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

- Didactic lectures to pre-clinical veterinary students (On average 4 over the course of the residency).

- Instructional imaging labs to the pre-clinical students (4-5 hours over the course of the residency).
- Teaching presentations on imaging topics to the radiology faculty and co-residents.
- Radiographic interpretation lecture to the house officers of other specialties.
- Radiographic rounds to the senior veterinary students (weekly).
- Ultrasound labs to the senior veterinary students (every two months).

**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 a large radiographic archive of proven cases and artifacts containing more than 2400 cases available to the residents using the American College of Radiology diagnostic code system.
In addition, since 2002, many of the previous slides and hard copy images used for teaching have been digitized and are available on the department's radiology server (over 100 cases of small, large and exotic animal teaching cases).
With the PACS system, images can be retrieved from the web-based image retrieval files. A teaching file is available on the PACS for large and small animal imaging, which is continuously expanded by the faculty. Currently it contains about 1,500 small and large animal imaging cases.
In addition, most of the known case conferences presented to or by the residents are done using Power Point Presentations that are then made available on a server for the residents to access.

**How many Known Case Conferences are conducted annually?** 20

**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.**

We have resident rounds every morning from 8 to 9 AM before the start of the clinics. See attached clinics schedule.

**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.**

All relevant veterinary journals are available online through the University of Pennsylvania library. Most reference books are available in radiology. Books that are not in the Radiology Section library can be found in the veterinary school library. A radiology library with virtually all current radiology textbooks across all species and modalities as well as the main physics books and reference internal medicine, cardiology and surgery textbooks is maintained by the Residency Director, and updated on a regular basis.
Both Philadelphia and New Bolton Center veterinary school campuses have libraries, plus the University of Pennsylvania Bio-Medical School library is within two blocks of the Veterinary School - Philadelphia campus. All faculty and residents have electronic access to the entire University of Pennsylvania Library System; access is also available remotely (e.g. from home) through the connectivity to the library online journal resources through google scholar. The Veterinary School Library, together with its branch, the Jean Austin duPont Library located at the New Bolton Center, supports all aspects of veterinary medicine and surgery and also includes basic science works pertaining to mammals, general biomedical texts, and materials on the care of exotic and domestic animals. The collection includes 34,000 volumes and 475 current serials. All holdings are catalogued in Franklin, the Penn Library online catalogue. The services and collections of the Biomedical Library (located at the School of Medicine) support research, education, and patient care for the University of Pennsylvania Health System, the School of Nursing, Biomedical Graduate Studies and graduate programs in the Biology Department. Emphasis is on the most current information available. The collection consists of more than 181,000 volumes and 2,900 current serials. The Biomedical Library houses over 60 public computers which connect to the Library Web via Netscape, allow to access and search Penn's Digital Library, and use productivity software. The Biomedical Library Microcomputer Center (MCC) is located on the ground floor. The MCC has over 40 computers in either Windows or Macintosh platforms which can access various word-processing, presentation, communication, Internet/web, and medicine-specific applications.

# 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.**

Mulvihill, Maria D. ; July 2020-July 2024
Quilty, Lawrence A ; July 2020-July 2024
Durrwachter, Rachel Frances ; July 2021-July 2025
Heacock, Elisa ; July 2021-July 2025
Wise, Robert L ; July 2022-July 2026
Goolik, Natalie M ; July 2022-July 2026
Yu, Jin ; July 2023-July 2027
Wang, May ; July 2023-July 2027

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

Yes

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

Drs Mai, Reetz, Manzi, Schlax, Mosenco, Cordella, Slater, Wulster

Residents are formally evaluated by the faculty every 6 months. They receive feedback in the form of a summary of these evaluation and if areas of weaknesses are identified, plans are made to address these with the residency director.

**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.**

If there is a conflict between a resident and other staff or faculty member, the resident would be encouraged to seek advice and support from both Human Resources and the Department Chairman. Each graduating resident undergoes an exit interview with the hospital director and department chair, and provides feedback on quality of specialty training received as well as well as fills out an evaluation form of the radiology faculty. The Penn Vet administration retains record of these interviews and surveys. If problems are identified, the residency director will be asked to provide a report with explanations and propose solutions.

# 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: 2

Number of Residents That Took Prelim Exam: 2

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

**2019**

Number Of Prelim Board Eligible Residents: 2

Number of Residents That Took Prelim Exam: 2

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

**2018**

Number Of Prelim Board Eligible Residents: 2

Number of Residents That Took Prelim Exam: 2

Number of Residents That Passed On 1st Attempt: 1

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 0

**2017**

Number Of Prelim Board Eligible Residents: 2

Number of Residents That Took Prelim Exam: 2

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 2

Number of Residents That Have Not Passed: 0

**2016**

Number Of Prelim Board Eligible Residents: 2

Number of Residents That Took Prelim Exam: 2

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

## Certifying Board Exam Pass Rate

**2020**

Number of Certifying Board Eligible Residents: 3

Number of Residents That Took Certifying Exam: 3

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 1

**2019**

Number of Certifying Board Eligible Residents: 4

Number of Residents That Took Certifying Exam: 4

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 1

**2018**

Number of Certifying Board Eligible Residents: 2

Number of Residents That Took Certifying Exam: 2

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 2

**2017**

Number of Certifying Board Eligible Residents: 2

Number of Residents That Took Certifying Exam: 2

Number of Residents That Passed On 1st Attempt: 2

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

**2016**

Number of Certifying Board Eligible Residents: 2

Number of Residents That Took Certifying Exam: 2

Number of Residents That Passed On 1st Attempt: 1

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 0

## 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**

2024 JAN FINAL.docx

RESIDENTS SCHEDULE 202... .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.