ACVR | Diagnostic Imaging

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.

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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 Georgia

Residency Program Director Name   Michael Perlini

Residency Program Director Email   mp69159@uga.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?   Sunday, January 1, 2023

Objectives

Succinctly state the objectives of the training program.

To provide training in all aspects of the field of veterinary diagnostic imaging through clinical experience and teaching while fulfilling the requirements of the American College of Veterinary Radiology. It is designed for residents to become competent in small and large animal diagnostic radiology, ultrasound, computed tomography, magnetic resonance imaging, and nuclear medicine and to prepare them for a successful career in academia, private practice, and/or teleradiology.

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?   32

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?

Off-clinic time is divided approximately as follows:
1. Cardiology rotation: 3 weeks
2. ACVR preliminary exam study: 6 weeks
3. ACVR certifying exam study: 2 weeks
4. ACVR Annual Conference: 1-2 weeks (residents go once or twice over the course of the residency, typically the year they are ready to present their research)
5. Vacation: 2 weeks/year
6. DEC/JAN holidays: 1 week/year
7. Additional time may be available for a research project depending on resident interest and staffing.

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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?   75

How many weeks per year will the Residency Director be on clinical service and teaching residents at the primary training institution?   39

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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: Robson Giglio

Hours/Year: Hours/Year: 50% clinical appointment providing primary support of residents = approximately 1,040 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: None

Institution: University of Georgia

Name: Lorrie Gaschen

Hours/Year: Hours/Year: One of the Vet CT virtual radiologists running the UGA Diagnostic Imaging Service and providing primary support of residents 2 weeks/month = total for VetCT will be approximately 960 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: Because VetCT is virtual, they do not supervise ultrasound, otherwise, they train in all areas.

Institution: Vet CT

Name: Bronwen Childs

Hours/Year: Hours/Year: One of the Vet CT virtual radiologists running the UGA Diagnostic Imaging Service and providing primary support of residents 2 weeks/month = total for VetCT will be approximately 960 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: Because VetCT is virtual, they do not supervise ultrasound, otherwise, they train in all areas.

Institution: Vet CT

Name: Hock Gan Heng

Hours/Year: Hours/Year: One of the Vet CT virtual radiologists running the UGA Diagnostic Imaging Service and providing primary support of residents 2 weeks/month = total for VetCT will be approximately 960 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: Because VetCT is virtual, they do not supervise ultrasound, otherwise, they train in all areas.

Institution: Vet CT

Name:

Hours/Year: Hours/Year: One of the Vet CT virtual radiologists running the UGA Diagnostic Imaging Service and providing 3 hr Equine rounds two Thursdays/month = approximately 70-80 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: Because VetCT is virtual, they do not supervise ultrasound, otherwise, they train in all areas.

Institution: Vet CT

Name: Cody Laas

Hours/Year: Full day the first Tuesday of each month and 5 hours/day, the remaining Tuesdays of each month = approximately 23 hours/month = approximately 276 hours/year

Specific Areas and/or Limitations of Instructional Responsibility: None

Institution: Teleradiologist and Part time UGA employee

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	Joe Bartges
ACVIM Member Institution	University of Geogia
ACVIM Member Email	jbartges@uga.edu
ACVS Member Name	Chad Schmiedt
ACVS Member Institution	University of Georgia
ACVS Member Email	cws@uga.edu
ACVP Member Name	James Stanton
ACVP Member Institution	University of Georgia
ACVP Member Email	jbs@uga.edu

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.

📄 2023 Letter of Affiliation for … .pdf

📄 New Form (1).pdf

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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?

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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)

Diagnostic Radiology
Small Animal Rooms (3): RadPRO Elite XM Overhead Suspension with 400KHU X-ray tube and manual 6 collimator with Canon CXDI-70C digital detectors, and RadPRO Elite XM 4-way float elevating table with dual mode 70 series docking station. RadPRO 80kW 3-phase 480V integrated DR generator:0-150 kVp, 10-800 mA, 1 ms-10s.

Small Animal Radiology/Fluoroscopy Room: RadPRO D2-50RF Digital Dynamic Radiographic System with CanonCXDI-50RF dynamic/static detector. Rad: 40-150kV, 10-150kV, 10-800mA, 1ms-10s. Fuoro: 40-120kV, 0.5-5mA (low dose) up to 7mA.

Large Animal Radiology Room: CPI Indico 100 RAD 100 kW, with Canon CXDI-70C OEM Detector.

Portable Units: RadPRO Mobile 40kW digital x-ray system, used with the Canon CXDI-70C OEM detector. MinX-ray machine HF80/15+dlp, 80kVp, 15mA with lighted collimator. Sound Sprint AIR DR Portable system, Eklin EDR5 MarkV.

Other Equipment: Fuji Smart CR, AGFA Drystar Axys printer and AFP imaging Mini Medical automatic processor.

Ultrasound
Cannon Aplio i700 with full range of transducers.
Toshiba Xario with full range of transducers.
GE LOgiQ- with full range of transducers and contrast enhanced ultrasound capability.

Computed Tomography
Siemens Somatom Sensation 64 slice scanner with Equus CT large animal table. Medrad Stellant automatic power injector.

Nuclear Medicine
Gamma camera system: IS, Digital 55, HRGP gamma camera. Mirage Nuclear Medicine Processing Computer System. Dedicated computer workstation. Ultrascan lift system (Enhanced Technologies).

Interventional Radiology: OEC 9900 Elite digital mobile high-resolution motorized C-arm with 12" image intensifier; 15kW generator for pulsed cone bolus chasing, digital subtraction angiography and road mapping. Large animal accessible.

Radiation Therapy
Trilogy (Varian) linear accelerator with 6MV x-ray beams, electron beams and HD multi-leaf collimator with six degrees of freedom couch. Supported by Varian Eclipse computerized radiation treatment planning equipment with IMRT and SRT software and record and verify (Varian Aria).

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

Each first-year resident will go through 12 weeks of training across all diagnostic imaging modalities to become familiar with equipment, technical skill and procedures. Residents work with the technical staff and faculty for each modality until they are able to perform image acquisition in each area. During the remainder of the residency, the residents with continue to operate equipment on an emergency or as needed basis during the day.
o Radiology – 2 weeks
o Ultrasound – 3 weeks
o CT – 3 weeks
o MRI- 4 weeks
• An additional 3 weeks is available for residents to become more familiar with any modality that requires additional training.
• During orientation the first-year residents are expected to shadow the on-call more senior Resident.

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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.	16136

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

Small animal radiology	8386
Large animal radiology	1793
Abdominal ultrasound	2725
Non-abdominal ultrasound	93
Computed tomography	1217
Magnetic Resonance Imaging	1147
Nuclear scintigraphy	74

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

Small animals (canine, feline): 82%

Large animals (equine, bovine, porcine, etc.): 16%

Avian, Exotic, and Wildlife animals: 2%

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

Yes

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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?

70

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

We have a large enough caseload with a small group of residents. The residents have enough cases to exceed the required caseload according to the ACVR essentials document.

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

99

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?

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?   99

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

Afterhours MRI, CT and Ultrasounds are performed and reported by residents. Afterhours Radiographs are sent to an outside teleradiology service at the discretion of the ordering clinician.

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   4200

Large animal radiology   100

Abdominal ultrasound   1500

Non-abdominal ultrasound   70

Computed tomography   500

Magnetic resonance Imaging   300

Nuclear scintigraphy   25

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

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   Yes

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.

The UGA ACVR residency is a non-degree graduate program. Multiple courses/rounds/seminars are included as part of the program.
1. Board objectives rounds are held 3 Mondays per month and are two hours long. They cover the physics of radiology, radiobiology, nuclear medicine, ultrasonography, computed tomography, magnetic resonance imaging, and other foundational information necessary to a board-certified radiologist.

2. Known Case Conferences (KCC) are held two times per month by Vet CT or the in house radiology faculty.

3. Journal club is held 2 times per month. Articles related to imaging are critically reviewed with a discussion of impact.

4. Imaging correlated pathology rounds are held 3 Fridays per month. Faculty and residents review imaging cases with definitive diagnoses.

5. Neuroradiology rounds are held 4 times per year. Faculty and residents from the Diagnostic Imaging and Neurology services discuss neurology cases and their imaging. These rounds are presented by a faculty neurologist or radiologist.

6. Grand rounds are held every Friday and cover a wide variety of topics related to specialty veterinary medicine and research. They are open to the entire college and presented by residents and interns. Radiology residents present once each year.

7. Virtual MRI rounds with Dr. Silke Hecht at the University of Tennessee are attended remotely by UGA residents 1-2 times per month. This includes a series of didactic lectures on MRI physics and artifacts.

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

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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)   16

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.

In the past, even though it is not a requirement of the ACVR or the UGA ACVR residency program, the majority of residents in this program have participated in research projects, presentations and publication of results. Residents are encouraged to engage in research and their research efforts may be supported/supervised by ACVR supervising diplomates, or their supervising diplomates may facilitate collaboration with specialists in other fields. Residents are encouraged to apply for both intramural and extramural funding for research. Funding through the department is also available. Research is typically presented in-house at grand rounds or the Steve Giguère Science of Veterinary Medicine Symposium and may be presented at the annual ACVR or equivalent national meeting.

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.

3 formal presentations per resident are expected to be given via weekly grand rounds. Residents can present an imaging based topic or their research. One presentation is given per resident each year.

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

Residents interact with students throughout the day on clinical cases. Residents are also encouraged

to contribute to student rounds one to three days per week.

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

A resident teaching file in a cloud-based spread sheet format is shared with all residents and faculty. In addition, any case imaged at UGA that has a definitive diagnosis is kept in a separate database for review by residents in a similar could-based spread sheet format. The databases are maintained and updated by faculty, residents and IT staff.

How many Known Case Conferences are conducted annually?   26

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.

1. Resident board objective rounds are held the second and third Monday of each three week block.

2. Resident case rounds are held Tuesday-Thursday from 8-amd -10pm. This includes Imaging path rounds with definitive diagnoses.

3. Two Thursdays of each month are dedicated to equine imaging rounds from 9-12 pm with Vet CT.

4. Neurorad rounds are held 4 times per year.

5. UGA Equine imaging rounds are held 4 times per year with the Equine Surgery and Medicine services.

6. Hospital grand rounds are held every Friday

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 residents have access to a medical publications via login through the UGA Library.
Key articles and article summaries are included in the UGA Radiology Resident course through UGA eLearning Commons. Additional resources for board study, quizzes and prior KCC can also be accessed here.

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Evaluation and Protection of Residents

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

Stephanie Belhorn, stephanie.belhorn@uga.edu, July 2020-July 2023
Kahlina Frey, kahlina.frey@uga.edu, July 2021-July 2024
Cody Wohlman, cody.wohlman@uga.edu, July 2022- July2025
Brian Huber, brian.huber@uga.edu, July 2022- July2025

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

List the current members of the resident review committee.

Michael Perlini
Jane Quandt
Nicole Northrup
Renee Barber
Spencer Johnston

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.

Resident conflicts are brought either to the residency director, section head, or department head. Any conflicts can also be brought tot he Department of Small Animal Medicine and Surgery Residency Training Committee (RTC).

Residents at the University of Georgia are graduate students and are entitled to all of the services as graduate students across the University, which can be found at the following link, http://grad.uga.edu.
 Conflicts may also be handled formally through the office of graduate affairs.

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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: 1

Number of Residents That Took Prelim Exam: 1

Number of Residents That Passed On 1st Attempt: 1

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2019

Number Of Prelim Board Eligible Residents: 1

Number of Residents That Took Prelim Exam: 1

Number of Residents That Passed On 1st Attempt: 1

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: 2

Number of Residents That Passed After Multiple Attempts: 0

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: 1

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 0

2016

Number Of Prelim Board Eligible Residents: 1

Number of Residents That Took Prelim Exam: 1

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 0

Certifying Board Exam Pass Rate

2020

Number of Certifying Board Eligible Residents: 1

Number of Residents That Took Certifying Exam: 1

Number of Residents That Passed On 1st Attempt: 1

Number of Residents That Passed After Multiple Attempts: 0

Number of Residents That Have Not Passed: 0

2019

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

2018

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: 0

Number of Residents That Have Not Passed: 1

2017

Number of Certifying Board Eligible Residents: 1

Number of Residents That Took Certifying Exam: 1

Number of Residents That Passed On 1st Attempt: 0

Number of Residents That Passed After Multiple Attempts: 1

Number of Residents That Have Not Passed: 0

2016

Number of Certifying Board Eligible Residents: 1

Number of Residents That Took Certifying Exam: 1

Number of Residents That Passed On 1st Attempt: 1

Number of Residents That Passed After Multiple Attempts: 0

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

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.